UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF NEW YORK

VALERIE GATES, on behalf of herself, all others similarly situated, and the general public, Plaintiff, v. NEXTFOODS, INC., Defendant.	Case No.: 5:23-cv-530 (FJS/ATB) CLASS ACTION **COMPLAINT FOR CONSUMER FRAUD, NEGLIGENT AND INTENTIONAL MISREPRESENTATION, AND UNJUST ENRICHMENT** DEMAND FOR JURY TRIAL

Plaintiff Valerie Gates, on behalf of herself, all others similarly situated, and the general public, by and through her undersigned counsel, brings this action against NextFoods, Inc. ("NextFoods"), and alleges the following upon her own knowledge, or where she lacks personal knowledge, upon information and belief, including the investigation of her counsel.

INTRODUCTION

1. For several years, NextFoods has sold a line of fruit juice beverages branded GoodBelly Probiotic JuiceDrinks (the "JuiceDrinks").[1] NextFoods represents on their labels that the JuiceDrinks promote "digestive health" and thereby promote "overall health," and "overall wellness."

2. The labeling of the JuiceDrinks is false or highly misleading for several reasons.

3. First, representations that the JuiceDrinks promote "digestive health" are false, or at least highly misleading, because the sugar contained in the JuiceDrinks directly harms digestive health. A reasonable consumer would not expect a product labeled as promoting "digestive health" to contain large amounts of another substance that directly and significantly harms digestive health, and thus would be misled.

4. Second, representations that the JuiceDrinks promote digestive health and thereby promote

[1] This includes at least the following varieties: Tropical Green, Blueberry Acai, Pomegranate Blackberry, Mango, Cranberry Watermelon, Strawberry Banana, Raspberry Blackberry, Orange, and Peach Mango Orange. For exemplars of the JuiceDrinks' labeling available at the time of filing, *see* Appendix 1.

"overall health," and "overall wellness" are also false, or at least highly misleading. This is because the sugar contained in the JuiceDrinks directly harms digestive health and those harmful effects to the digestive system increase inflammation which and thereby increase risk of metabolic syndrome, obesity, and type 2 diabetes. A reasonable consumer would not expect a product labeled as promoting "overall health," and "overall wellness" to contain large amounts of another substance that directly and significantly increases risk of chronic diseases like metabolic syndrome, obesity, and type 2 diabetes and others.

5. Third, given the representations that the JuiceDrinks promote "digestive health" and also thereby promote "overall health," and "overall wellness," the JuiceDrinks omit material facts regarding the harmful effects of sugar on both digestive and overall health.

6. Plaintiff brings this action against NextFoods on behalf of herself, similarly-situated Class Members, and the general public to recover compensation for injured Class Members.

JURISDICTION & VENUE

1. This Court has original jurisdiction over this action under 28 U.S.C. § 1332(d)(2) (The Class Action Fairness Act) because the matter in controversy exceeds the sum or value of $5,000,000, exclusive of interest and costs, and at least one member of the class of plaintiffs is a citizen of a State different from NextFoods. In addition, more than two-thirds of the members of the class reside in states other than the state in which NextFoods is a citizen and in which this case is filed, and therefore any exceptions to jurisdiction under 28 U.S.C. § 1332(d) do not apply.

2. The Court has personal jurisdiction over NextFoods because it has purposely availed itself of the benefits and privileges of conducting business activities within New York, including by marketing, distributing, and selling the JuiceDrinks in New York.

3. Venue is proper in the Northern District of New York pursuant to 28 U.S.C. § 1391(b) and (c), because NextFoods resides (*i.e.*, is subject to personal jurisdiction) in this district, and because a substantial part of the events or omissions giving rise to the claims occurred in this district.

PARTIES

4. Plaintiff Valerie Gates is a citizen of New York because she resides in New York and intends to remain there.

5. Defendant NextFoods, Inc. is a Colorado corporation with its principal place of business in Boulder, Colorado.

FACTS

I. NEXTFOODS MARKETS THE JUICEDRINKS AS BENEFICIAL TO DIGESTIVE AND OVERALL HEALTH

6. NextFoods was founded by two food industry veterans who helped popularize products consumers perceive as healthy, like Silk Soymilk. Their self-described mission "was born out of the age-old mantra that food is the best medicine."[2] According to one founder's "epiphany," the Baby Boomer generation needs "some help having long, happy, healthy and active lives . . . but they need a means to do it and [sic] that means is better food."[3] The company was started in late 2006, with the promise that its products would have "scientifically substantiated health benefits combined with the goodness and responsibility of healthy, natural foods."[4] NextFoods communicates to consumers that the JuiceDrinks are "just the thing to give us that extra boost we need as we're trekking along on our own personal journeys toward GoodHealth and nutrition."[5]

7. As NextFoods is well aware, consumers prefer healthful foods and are willing to pay more for, or purchase more often, products marketed and labeled as healthy. For instance, a Nielsen 2015 Global Health & Wellness Survey found that "88% of those polled are willing to pay more for healthier foods."[6]

8. Accordingly, NextFoods markets the JuiceDrinks as promoting digestive health, as well as "overall" health and wellness, by placing on the JuiceDrinks' labels, statements that expressly or implicitly convey the message that the JuiceDrinks are healthy.

9. During the Class Period, the JuiceDrinks' labels bore at least the following statements, which individually and in the context of the label as a whole, convey a message that the JuiceDrinks promote digestive health and overall health:

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[2] NextFoods Inc., "About" Page, https://goodbelly.com/about (last visited July 7, 2021).

[3] *Id*.

[4] *See id*.

[5] *Id*.

[6] Nancy Gagliardi, "Consumers Want Healthy Foods--And Will Pay More For Them," *Forbes* (Feb. 18, 2015) (citing Neilson, Global Health & Wellness Survey, at 11 (Jan. 2015)).

a. "START YOUR GOODHEALTH GAME PLAN . . . Drink one 8 oz. glass of delicious GoodBelly a day for 12 days.";

b. "Reboot your belly, then make GoodBelly your daily drink to keep your GoodHealth going. Because when your belly smiles the rest of you does too."

c. "WE DIG SCIENCE. LP299V is naturally occurring in the human gut. It has been studied more than 2 decades and has numerous research trials to show that it may help promote healthy digestion and overall wellness"; and

d. "GoodBelly Probiotics is a delicious blend of fruit juices and a daily dose of probiotic cultures created to naturally renew your digestive health, right where your overall health gets started – in your belly."[7]

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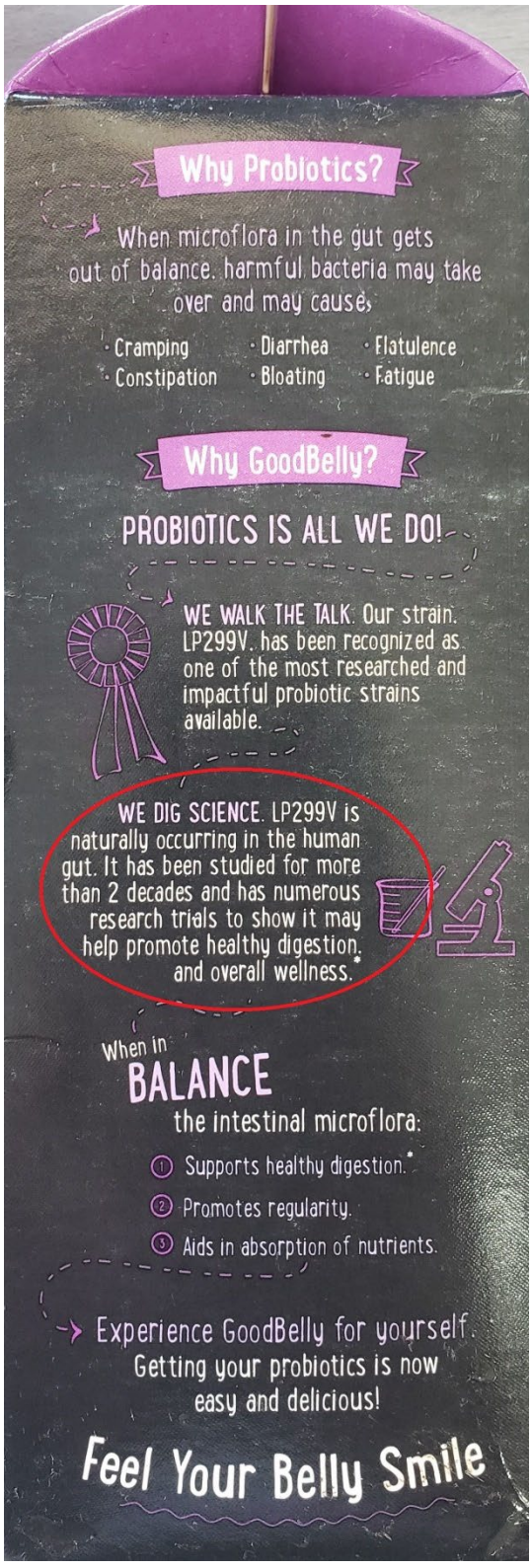
[7] According to NextFoods, "Probiotics are living microorganisms, which, when taken in adequate amounts, have a beneficial effect on the body." *See* NextFoods Inc., "The Science" Page, https://goodbelly.com/goodhealth.

10. An exemplar of the JuiceDrinks' health and wellness labeling is shown below.



II. SCIENTIFIC EVIDENCE DEMONSTRATES THAT CONSUMING SUGAR, LIKE THAT IN NEXTFOOD'S JUICEDRINKS, HARMS DIGESTIVE HEALTH

A. The Sugar in the NextFoods JuiceDrinks Harms the Gut Microbiota

11. Diet plays a central role in shaping the microbiota that make up the gut biome in human' digestive tracts. In fact, studies "suggest that diet has a dominant role over other possible variables such as ethnicity, sanitation, hygiene, geography, and climate, in shaping the gut microbiota."[8]

12. Studies also show that certain types of nutrients have specific effects on the gut microbiota.

13. "For example, complex polysaccharides commonly referred to as dietary fiber, remain undigested in the small intestine, reach the microbiota in the distal gut, and promote colonization by beneficial microbes associated with lean and healthy individuals."[9]

14. "Conversely, diets rich in simple sugars favor the expansion of [harmful microbial] organisms . . ."[10] in at least four separate ways.

15. First, simple sugars serve as a nutrient for harmful bacteria and "[r]ecent studies have shown that high intake of sugars increase the relative abundance of [harmful] Proteobacteria in the gut, while simultaneously decreasing the abundance of [beneficial] Bacteroidetes. "[11]

16. Second, and importantly, high sugar diets result in "lost gut microbial diversity."[12]

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[8] De Filippo, C., et al., "Impact of diet in shaping gut microbiota revealed by a comparative study in children from Europe and rural Africa," *PNAS*, Vol. 107, No. 33, 14691-14696 (August 17, 2010); *see also* Brown, K, et al., "Diet-Induced Dysbiosis of the Intestinal Microbiota and the Effects on Immunity and Disease," *Nutrients* 2012, *4*, 1095-1119 ("the composition of the gut microbiota strongly correlates with diet as demonstrated by a study assessing the relative contributions of host genetics and diet in shaping the gut microbiota" "dietary changes could explain 57% of the total structural variation in gut microbiota whereas changes in genetics accounted for no more than 12% This indicates that diet has a dominating role in shaping gut microbiota") [hereafter "De Filippo, Diet-Induced Dysbiosis of the Intestinal Microbiota"].

[9] Townsend II, G., et al., "Dietary sugar silences a colonization factor in a mammalian gut symbiont," PNAS, Vol. 116, No. 1, 233-238 (January 2, 2019) [hereinafter "Townsend II, Dietary sugar silences a colonization factor"].

[10] *Id.*

[11] Satokari, R., "High Intake of Sugar and the Balance between Pro- and Anti-Inflammatory Gut Bacteria," *Nutrients* 2020 May, 12(5), 1348 (published online May 8, 2020) [hereinafter "Satokari, High Intake of Sugar"].

[12] Ho Do, M., et al., "High-Glucose or -Fructose Diet Cause Changes of the Gut Microbiota and Metabolic Disorders in Mice without Body Weight Change," *Nutrients* 2018, 10, 761 (June 13, 2018) [hereinafter "Ho Do, High-Glucose or -Fructose Diet Cause Changes of the Gut Microbiota and Metabolic Disorders "]; *see also* Jian-Mei Li, et al., "Dietary fructose-induced gut dysbiosis promotes mouse hippocampal

17. Third, independent of their effect as a nutrient for harmful microbiota, because consuming sugar increases bile output, "[r]efined sugars," also "mediate the overgrowth of opportunistic[, harmful] bacteria like C. difficile and C. perfringens,"[13] which feed on the bile.

18. Fourth, sugar "can impact gut colonization by the microbiota independently of their ability to serve as nutrients" since both "fructose and glucose silence a critical colonization factor, called Roc, in a widely distributed gut commensal bacterium B. thetaiotaomicron." [14]

19. These changes in the gut microbiota composition harm digestive health and increase risk of chronic digestive track conditions.

20. Specifically, "[e]vidence suggests that the composition of the intestinal microbiota can influence susceptibility to chronic disease of the intestinal tract including ulcerative colitis, Crohn's disease, celiac disease and irritable bowel syndrome . . . ."[15]

21. "Evidence [also] suggests that the composition of the intestinal microbiota can influence susceptibility to . . . more systemic diseases such as obesity, type 1 diabetes and type 2 diabetes."[16]

22. In sum, "high sugar intake may stagger the balance of microbiota to have increased pro-inflammatory properties and decreased [] capacity to regulate epithelial integrity and mucosal immunity. Consequently, high dietary sugar can, through the modulation of microbiota, promote metabolic endotoxemia, systemic (low grade) inflammation and the development of metabolic dysregulation and thereby, high dietary sugar may have many-fold deleterious health effects, in addition to providing excess energy." [17]

B. The Sugar in the NextFoods JuiceDrinks Harms the Gut Barrier

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neuroinflammation: a benefit of short-chain fatty acids," *Microbiome*, 7, Article No. 98 (2019) (June 29, 2019) ("The abundance of Bacteroidetes was significantly decreased and Proteobacteria was significantly increased in fructose-fed mice") [hereinafter "Jian-Mei Li, Dietary fructose-induced gut dysbiosis"].

[13] De Filippo, Diet-Induced Dysbiosis of the Intestinal Microbiota, *supra* n.8.

[14] Townsend II, Dietary sugar silences a colonization factor, *supra* n.9 ("dietary simple sugars can suppress gut colonization in a commensal bacterium just by altering the levels of a colonization factor [know as Roc] dispensable for the utilization of such sugars.").

[15] De Filippo, Diet-Induced Dysbiosis of the Intestinal Microbiota, *supra* n.8.

[16] *Id.*

[17] Satokari, High Intake of Sugar, *supra* n.11.

23. "The gut barrier consists of a specialized, semi-permeable mucosal, and epithelial cell layers that are reinforced by tight junction proteins. Among other functions, this barrier serves to regulate nutrient and water entry and prevents the entry of harmful compounds into extra-luminal tissues" and the blood.[18]

24. When the permeability of the gut or epithelial barrier is increased, this "allows for the influx of adverse substances and may ultimately contribute to the development of metabolic disorders, and cognitive dysfunction."[19]

25. "A compromised gut barrier makes the intestinal tract potentially vulnerable to the gram-negative bacteria-derived LPS, which upon excess entry into circulation promotes endotoxemia and systemic inflammation."[20]

26. Both glucose and fructose increase gut barrier permeability.

27. "Although dietary fructose was thought to be metabolized exclusively in the liver, evidence has emerged that it is also metabolized in the small intestine and leads to intestinal epithelial barrier deterioration."[21] A high fructose diet, for example, has been found to result in the "thinning of the intestinal mucosa, epithelium, and muscularis mucosae; loss of crypts and glands" among other harmful effects.[22]

28. The "increase[d] intestinal permeability," in turn "precedes the development of metabolic endotoxemia, inflammation, and lipid accumulation, ultimately leading to hepatic steatosis and normal-weight obesity." [23]

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[18] Noble, E., et al., "Gut to Brain Dysbiosis: Mechanisms Linking Western Diet Consumption, the Microbiome, and Cognitive Impairment," *Front Behav. Neurosci*. 2017, 11:9 (published online January 30, 2017).

[19] *Id.*

[20] *Id.* (Studies have found "elevated plasma levels of a gavaged fluorescent molecule (FITC-dextran) that is typically unable to cross the gut barrier.").

[21] Febbraio, M., et al., "'Sweet death': Fructose as a metabolic toxin that targets the gut-liver axis," Cell Metab. 2021 Dec 7;33(12):2316-2328 (published online October 6, 2021) [hereinafter "Febbraio, Fructose as a metabolic toxin that targets the gut-liver axis"].

[22] Jian-Mei Li, Dietary fructose-induced gut dysbiosis, *supra* n.12.

[23] Ho Do, High-Glucose or -Fructose Diet Cause Changes of the Gut Microbiota and Metabolic Disorders, *supra* n.12.

29. In addition, "[t]he monosaccharide fructose can escape absorption in the small intestine and reach the microbiota in the distal gut, where microbiota-derived products of fructose metabolism enter the host blood."[24]

30. Thus, "excessive fructose consumption" has been shown to "result[] in barrier deterioration, dysbiosis, low-grade intestinal inflammation, and endotoxemia."[25]

31. In short, consuming fructose, like that in the GoodBelly JuiceDrinks, has numerous harmful effects on the gut barrier.[26, 27, 28, 29]

32. Like fructose, glucose also harms the gut barrier. For example, both a "[high glucose diet] and [high fructose diet] increased gut permeability and disrupted the gut barrier."[30] This harms the health of the digestive track because "damaged gut barriers" lead to endotoxins crossing the epithelial and into the blood stream, resulting in "higher [blood] plasma endotoxin levels."[31]

33. Not only does glucose harm the gut barrier from within the digestive track, high levels of glucose in the blood, known as "[h]yperglycemia[,] markedly interfered with homeostatic epithelial integrity, leading to abnormal influx of immune-stimulatory microbial products and a propensity for systemic spread

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[24] Townsend II, Dietary sugar silences a colonization factor, *supra* n.9.

[25] Febbraio, Fructose as a metabolic toxin that targets the gut-liver axis, *supra* n.21.

[26] Satokari, High Intake of Sugar, *supra* n.11 ("consuming high amounts of sugar harms the gut by "increasing small intestinal permeability in healthy humans,").

[27] Ho Do, High-Glucose or -Fructose Diet Cause Changes of the Gut Microbiota and Metabolic Disorders, *supra* n.12 ("diet induced changes in the gut microbiota affect the expression of tight junction proteins and inflammatory cytokines, which leads to increased gut permeability and inflammation").

[28] Febbraio, Fructose as a metabolic toxin that targets the gut-liver axis, *supra* n.21 ("fructose, . . . led to the downregulation of enterocyte tight-junction proteins and subsequent barrier deterioration, which is in agreement with previous rodents and human studies (Jin et al., 2014; Kavanagh et al., 2013; Lambertz et al., 2017; Spruss et al., 2012).").

[29] Young-Eun Cho, et al., "Fructose Promotes Leaky Gut, Endotoxemia, and Liver Fibrosis Through Ethanol-Inducible Cytochrome P450-2E1–Mediated Oxidative and Nitrative Stress," Hepatology, Vol. 73, Issue 6, June 2021, 2180-2195 (April 8, 2019) ("fructose intake causes protein nitration of intestinal [tight-junction] and AJ proteins, resulting in increased gut leakiness, endotoxemia, and steatohepatitis with liver fibrosis").

[30] Ho Do, High-Glucose or -Fructose Diet Cause Changes of the Gut Microbiota and Metabolic Disorders, *supra* n.12.

[31] *Id.*

of enteric pathogens."[32] This happens, at least in part, because "hyperglycemia causes retrograde transport of glucose into intestinal epithelial cells via GLUT2, followed by alterations in intracellular glucose metabolism and transcriptional reprogramming."[33]

34. In short, "experiments establish hyperglycemia as a direct and specific cause for intestinal barrier dysfunction and susceptibility to enteric infection,"[34] such that "[b]lood glucose concentrations are associated with microbial product influx in humans[.]" [35]

III. SCIENTIFIC EVIDENCE DEMONSTRATES THAT CONSUMING JUICE, LIKE NEXTFOOD'S JUICEDRINKS, HARMS OVERALL HEALTH

35. In addition to harming the digestive track directly, because sugar consumption negatively impacts the gut microbiota composition and harms the gut barrier (which causes inflammation), it can also increase risk of "more systemic diseases such as obesity, type 1 diabetes and type 2 diabetes."[36]

A. Juice Consumption is Associated with Increased Risk of Metabolic Disease

36. Excess sugar consumption leads to metabolic syndrome by stressing and damaging crucial organs, including the pancreas and liver. When the pancreas, which produces insulin, becomes overworked, it can fail to regulate blood sugar properly. Large doses of fructose can overwhelm the liver, which metabolizes fructose. In the process, the liver will convert excess fructose to fat, which is stored in the liver and released into the bloodstream. This process contributes to key elements of metabolic syndrome, including high blood fats and triglycerides, high cholesterol, high blood pressure, and extra body fat, especially in the belly.[37]

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[32] Thaiss, C., et al., "Hyperglycemia drives intestinal barrier dysfunction and risk for enteric infection," Science 359, 1376–1383 (2018) (March 23, 2018) ("We have identified glucose as an orchestrator of intestinal barrier function.").

[33] *Id.*

[34] *Id.*

[35] *Id.* (Human studies "suggest that similar to their effects in mice, serum glucose concentrations, rather than obesity, may associate with or potentially even drive intestinal barrier dysfunction in humans.").

[36] De Filippo, Diet-Induced Dysbiosis of the Intestinal Microbiota, *supra* n.8.

[37] Te Morenga, L., et al., "Dietary sugars and body weight: systematic review and meta-analyses of randomized controlled trials and cohort studies," *BJM* (January 2013) [hereinafter, "Te Morenga, Dietary Sugars & Body Weight"].

37. Metabolic disease has been linked to type 2 diabetes, cardiovascular disease, obesity, polycystic ovary syndrome, nonalcoholic fatty liver disease, and chronic kidney disease, and is defined as the presence of any three of the following:

a. Large Waist Size (35" or more for women, 40" or more for men);

b. High triglycerides (150mg/dL or higher, or use of cholesterol medication);

c. High total cholesterol, or HDL levels under 50mg/dL for women, and 40 mg for men;

d. High blood pressure (135/85 mm or higher); or

e. High blood sugar (100mg/dL or higher).

38. More generally, "metabolic abnormalities that are typical of the so-called metabolic syndrome . . . includ[e] insulin resistance, impaired glucose tolerance, high concentrations of circulating triacylglycerols, low concentrations of HDLs, and high concentrations of small, dense LDLs."[38]

39. Fifty-six million Americans have metabolic syndrome, or about 22.9% over the age of 20, placing them at higher risk for chronic disease.

40. In 2010, Harvard researchers published a meta-analysis of three studies, involving 19,431 participants, concerning the effect of consuming sugar-sweetened beverages on risk for metabolic syndrome. They found participants in the highest quantile of 1-2 servings per day[39] had an average 20% greater risk of developing metabolic syndrome than did those in the lowest quantile of less than 1 serving per day, showing "a clear link between SSB consumption and risk of metabolic syndrome . . . ."[40]

41. Researchers who studied the incidence of metabolic syndrome and its components in relation to soft drink consumption in more than 6,000 participants in the Framingham Heart Study found that individuals who consumed 1 or more soft drinks per day (i.e., 140-150 calories and 35-37.5 grams of sugar or more) had a 48% higher prevalence of metabolic syndrome than infrequent consumers, those who drank

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[38] Fried, S.K., "Sugars, hypertriglyceridemia, and cardiovascular disease," *American Journal of Clinical Nutrition*, Vol. 78 (suppl.), 873S-80S, at 873S (2003) [hereinafter, "Fried, Hypertriglyceridemia"].

[39] Because 1 sugar-sweetened beverage typically has 140-150 calories and 35-37.5 grams of sugar per 12-ounce serving, this is equivalent to between 140 and 300 calories per day, and 35 to 75 grams of sugar per day.

[40] Malik, Vasanti S., et al., "Sugar-Sweetened Beverages and Risk of Metabolic Syndrome and Type 2 Diabetes," *Diabetes Care*, Vol. 33, No. 11, 2477-83, at 2477, 2480-81 (November 2010) [hereinafter "Malik, 2010 Meta-Analysis"].

less than 1 soft drink per day. In addition, the frequent-consumer group had a 44% higher risk of developing metabolic syndrome.[41]

B. Juice Consumption is Associated with Increased Risk of Type 2 Diabetes

42. Diabetes affects 25.8 million Americans, and can cause kidney failure, lower-limb amputation, and blindness. In addition, diabetes doubles the risk of colon and pancreatic cancers and is strongly associated with coronary artery disease and Alzheimer's disease.[42]

43. In 2010, Harvard researchers also performed a meta-analysis of 8 studies concerning sugar-sweetened beverage consumption and risk of type 2 diabetes, involving a total of 310,819 participants. They concluded that individuals in the highest quantile of SSB intake had an average 26% greater risk of developing type 2 diabetes than those in the lowest quantile.[43] Moreover, "larger studies with longer durations of follow-up tended to show stronger associations."[44] Thus, the meta-analysis showed "a clear link between SSB consumption and risk of . . . type 2 diabetes."[45]

44. An analysis of data for more than 50,000 women from the Nurses' Health Study,[46] during two 4-year periods (1991-1995, and 1995-1999), showed, after adjusting for confounding factors, that women who consumed 1 or more sugar-sweetened soft drink per day (*i.e.*, 140-150 calories and 35-37.5 grams of sugar), had an 83% greater relative risk of type 2 diabetes compared with those who consumed less than 1

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[41] Dhingra, R., et al., "Soft Drink Consumption and Risk of Developing Cardiometabolic Risk Factors and the Metabolic Syndrome in Middle-Aged Adults in the Community," *Circulation*, Vol. 116, 480-88 (2007) [hereinafter "Dhingra, Cardiometabolic Risk"].

[42] Aranceta Bartrina, J. et al., "Association between sucrose intake and cancer: a review of the evidence," *Nutrición Hospitalaria*, Vol. 28 (Suppl. 4), 95-105 (2013); Garcia-Jimenez, C., "A new link between diabetes and cancer: enhanced WNT/beta-catenin signaling by high glucose," *Journal of Molecular Endrocrinology*, Vol. 52, No. 1 (2014); Linden, G.J., "All-cause mortality and periodontitis in 60-70-year-old men: a prospective cohort study," *Journal of Clinical Periodontal*, Vol. 39, No. 1, 940-46 (October 2012).

[43] Malik, 2010 Meta-Analysis, *supra* n.40 at 2477, 2480.

[44] *Id.* at 2481.

[45] *Id.*

[46] The Nurses' Health Study was established at Harvard in 1976, and the Nurses' Health Study II, in 1989. Both are long-term epidemiological studies conducted on women's health. The study followed 121,700 women registered nurses since 1976, and 116,000 female nurses since 1989, to assess risk factors for cancer, diabetes, and cardiovascular disease. The Nurses' Health Studies are among the largest investigations into risk factors for major chronic disease in women ever conducted. *See generally* "The Nurses' Health Study," *at* http://www.channing.harvard.edu/nhs.

such beverage per month, and women who consumed 1 or more fruit punch drinks per day had a 100% greater relative risk of type 2 diabetes.[47]

45. The result of this analysis shows a statistically significant linear trend with increasing sugar consumption.[48]

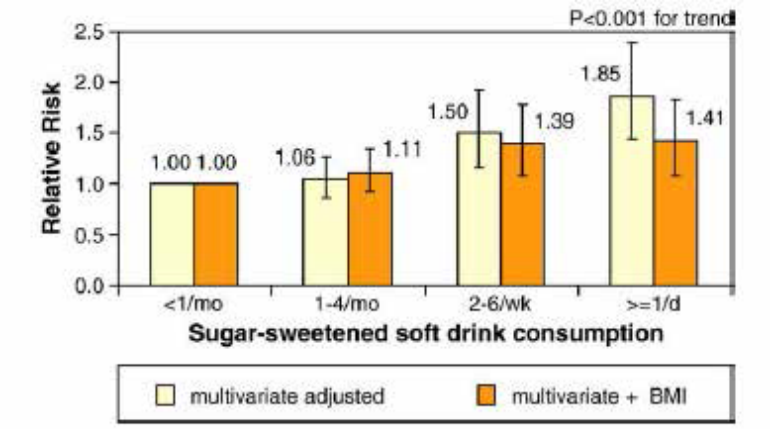

Fig. 4. Multivariate relative risks (RRs) of type 2 diabetes according to sugar-sweetened soft drink consumption in the Nurses' Health Study II 1991–1999 (Multivariate RRs were adjusted for age, alcohol (0, 0.1–4.9, 5.0–9.9, 10+ g/d), physical activity (quintiles), family history of diabetes, smoking (never, past, current), postmenopausal hormone use (never, ever), oral contraceptive use (never, past, current), intake (quintiles) of cereal fiber, magnesium, trans fat, polyunsaturated:saturated fat, and consumption of sugar-sweetened soft drinks, diet soft drinks, fruit juice, and fruit punch (other than the main exposure, depending on model). The data were based on Ref. [50]).

46. A prospective cohort study of more than 43,000 African American women between 1995 and 2001 showed that the incidence of type 2 diabetes was higher with higher intake of both sugar-sweetened soft drinks and fruit drinks. After adjusting for confounding variables, those who drank 2 or more soft drinks per day (*i.e.*, 140-300 calories and 35-75 grams of sugar) showed a 24% greater risk of type 2 diabetes, and

[47] Schulze, M.B., et al., "Sugar-Sweetened Beverages, Weight Gain, and Incidence of Type 2 Diabetes in Young and Middle-Aged Women," *Journal of the American Medical Association*, Vol. 292, No. 8, 927-34 (Aug. 25, 2004) [hereinafter "Schulze, Diabetes in Young & Middle-Aged Women"].

[48] Hu, F.B., et al., "Sugar-sweetened beverages and risk of obesity and type 2 diabetes: Epidemioligic evidence," *Physiology & Behavior*, Vol. 100, 47-54 (2010).

those who drank 2 or more fruit drinks per day showed a 31% greater risk of type 2 diabetes, than those who drank 1 or less such drinks per month.[49]

47. A large cohort study of 71,346 women from the Nurses' Health Study followed for 18 years showed that those who consumed 2 to 3 apple, grapefruit, and orange juices per day (280-450 calories and 75-112.5 grams of sugar) had an 18% greater risk of type 2 diabetes than women who consumed less than 1 sugar-sweetened beverage per month. The data also showed a linear trend with increased consumption, as demonstrated below.[50]

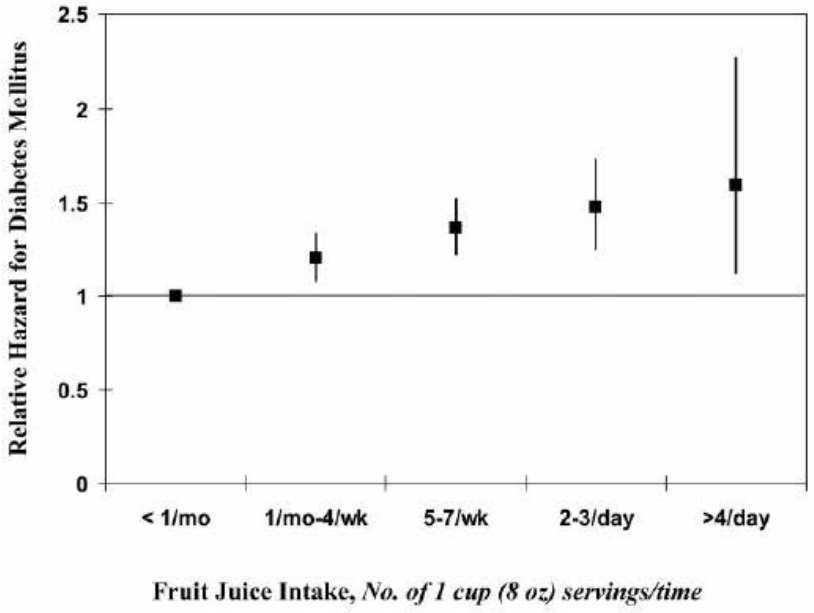

Figure 1—*Multivariate-adjusted relative hazard of diabetes by category of cumulatively updated fruit juice intake. Values were adjusted for cumulatively updated BMI, physical activity, family history of diabetes, postmenopausal hormone use, alcohol use, smoking, and total energy intake. For an increase of 1 serving/day of fruit juice, the multivariate-adjusted relative risk was 1.18 (95% CI 1.10–1.26; P < 0.0001).*

48. An analysis of more than 40,000 men from the Health Professionals Follow-Up Study, a prospective cohort study conducted over a 20-year period, found that, after adjusting for age and a wide variety of other confounders, those in the top quartile of sugar-sweetened beverage intake had a 24% greater

[49] Palmer, J.R., et al., "Sugar-Sweetened Beverages and Incidence of Type 2 Diabetes Mellitus in African American Women," *Archive of internal Medicine*, Vol. 168, No. 14, 1487-82 (July 28, 2008) [hereinafter "Palmer, Diabetes in African American Women"].

[50] Bazzano, L.A., et al., "Intake of fruit, vegetables, and fruit juices and risk of diabetes in women," *Diabetes Care*, Vol. 31, 1311-17 (2008).

risk of type 2 diabetes than those in the bottom quartile, while consumption of artificially-sweetened beverages, after adjustment, showed no association.[51]

49. In an analysis of tens of thousands of subjects from three prospective longitudinal cohort studies (the Nurses' Health Study, Nurses' Health Study II, and Health Professionals Follow-up Study), researchers found, after adjusting for BMI, initial diet, changes in diet, and lifestyle covariates, that increasing sugary beverage intake—which included both sugar-sweetened beverages and fruit juice—by half-a-serving per day over a 4-year period was associated with a 16% greater risk of type 2 diabetes.[52]

50. In another study of subjects from the Nurses' Health Study, Nurses' Health Study II, and Health Professionals Follow-up Study, researchers set out to "determine whether individual fruits are differentially associated with risk of type 2 diabetes," looking at the associated risk with eating three servings per week of blueberries, grapes and raisins, prunes, apples and pears, bananas, grapefruit, oranges, strawberries, cantaloupe, and peaches, plums and apricots, as well as "the same increment" in fruit juice consumption. They found that "[g]reater consumption of specific whole fruits" was "significantly associated with a lower risk of type 2 diabetes, whereas greater consumption of fruit juice is associated with a higher risk." The increased risk was approximately 8% based on three fruit juice servings per week.[53] Similarly, a meta-analysis of 17 prospective cohort studies showed higher consumption of fruit juice was associated with a 7% greater incidence of type 2 diabetes after adjusting for adiposity.[54]

51. An econometric analysis of repeated cross-sectional data published in 2013 established a causal relationship between sugar availability and type 2 diabetes. After adjusting for a wide range of confounding factors, researchers found that an increase of 150 calories per day related to an insignificant

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[51] de Konig, L., et al., "Sugar-sweetened and artificially sweetened beverage consumption and risk of type 2 diabetes in men," *American Journal of Clinical Nutrition*, Vol. 93, 1321-27 (2011).

[52] Drouin-Chatier, J., et al., "Changes in Consumption of Sugary Beverages and Artificially Sweetened Beverages and Subsequent Risk of Type 2 Diabetes: Results From Three Large Prospective U.S. Cohorts of Women and Men." *Diabetes Care*, Vol. 42, pp. 2181-89 (Dec. 2019).

[53] Muraki, I., et al., "Fruit consumption and risk of type 2 diabetes: results from three prospective longitudinal cohort studies." *BMJ* (Aug. 28, 2013).

[54] Imamura, F., et al., "Consumption of sugar sweetened beverages, artificially sweetened beverages, and fruit juice and incidence of type 2 diabetes: systematic review, meta-analysis, and estimation of population attributable fraction." *BMJ*, Vol. 351 (2015).

0.1% rise in diabetes prevalence by country, while an increase of 150 calories per day in sugar related to a 1.1% rise in diabetes prevalence by country, a statically-significant 11-fold difference.[55]

C. Juice Consumption is Associated with Increased Risk of Cardiovascular Heart Disease

52. Heart disease is the number one killer in the United States. The scientific literature demonstrates that consumption of sugar-containing beverages (SCB), including juices, at amounts typically consumed, has deleterious effects on heart health.

53. In a study published in January 2020, researchers set out to determine whether consumption of SCBs, including juice, is associated with cardiometabolic risk (CMR) in preschool children, using 2007-2018 data from TARGet Kids!, a primary-care, practice-based research network in Canada. After adjusting for sociodemographic, familial, and child-related covariates, higher consumption of SCB was significantly associated with elevated CMR scores, including lower HDL "good" cholesterol, and higher triglycerides. In addition, when examined separately, juice specifically was significantly associated with lower HDL cholesterol. The researchers stated that their "findings support recommendations to limit overall intake of SCB in early childhood, in [an] effort to reduce the potential long-term burden of CMR."[56]

54. But juice consumption does not just detrimentally affect children. Analyzing data from the Danish Diet, Cancer and Health cohort study, representing 57,053 men and women aged 50 to 64 years old, researchers found "a tendency towards a lower risk of ACS [acute coronary syndrome] . . . for both men and women with higher [whole] fruit and vegetable consumption," but "a higher risk . . . among women with higher fruit juice intake[.]"[57]

55. In one study, those who consumed juice daily, rather than rarely or occasionally, had significantly higher central systolic blood pressure, a risk factor for cardiovascular disease, even after adjusting for age, height, weight, mean arterial pressure, heart rate, and treatment for lipids and hypertension.[58]

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[55] Basu, S., et al., "The Relationship of Sugar to Population-Level Diabetes Prevelance: An Econometric Analysis of Repeated Cross-Sectional Data," *PLOS Online*, Vol. 8, Issue 2 (February 27, 2013).

[56] Eny, KM, et al., "Sugar-containing beverage consumption and cardiometabolic risk in preschool children." *Prev. Med. Reports* 17 (Jan. 14, 2020).

[57] Hansen, L., et al., "Fruit and vegetable intake and risk of acute coronary syndrome." *British J. of Nutr.*, Vol. 104, p. 248-55 (2010).

[58] Pase, M.P., et al., "Habitual intake of fruit juice predicts central blood pressure." *Appetite*, Vol. 84, p. 658-72 (2015).

56. Studies of the cardiovascular effects of added sugar consumption further suggest juice consumption causes increased risk for and contraction of cardiovascular disease, since the free sugars in juice act physiologically identically to added sugars, such as those in sugar-sweetened beverages.

57. For example, data obtained from NHANES surveys during the periods of 1988-1994, 1999-2004, and 2005-2010—after adjusting for a wide variety of other factors—demonstrate that those who consumed 10% - 24.9% of their calories from added sugar had a 30% greater risk of cardiovascular disease (CVD) mortality than those who consumed 5% or less of their calories from added sugar. In addition, those who consumed 25% or more of their calories from added sugar had an average 275% greater risk of CVD mortality than those who consumed less than 5% of calories from added sugar. Similarly, when compared to those who consumed approximately 8% of calories from added sugar, participants who consumed approximately 17% - 21% (the 4th quintile) of calories from added sugar had a 38% higher risk of CVD mortality, while the relative risk was more than double for those who consumed 21% or more of calories from added sugar (the 5th quintile). Thus, "[t]he risk of CVD mortality increased exponentially with increasing usual percentage of calories from added sugar," as demonstrated in the chart below.[59]

58. The NHANES analysis also found "a significant association between sugar-sweetened beverage consumption and risk of CVD mortality," with an average 29% greater risk of CVD mortality "when comparing participants who consumed 7 or more servings/wk (360 mL per serving) with those who consumed 1 serving/wk or less . . . ."[60] The study concluded that "most US adults consume more added sugar than is recommended for a healthy diet. A higher percentage of calories from added sugar is associated with significantly increased risk of CVD mortality. In addition, regular consumption of sugar-sweetened beverages is associated with elevated CVD mortality."[61]

59. Data from the Nurses' Health Study consistently showed that, after adjusting for other unhealthy lifestyle factors, those who consumed two or more sugar-sweetened beverages per day (280

[59] Yang, Quanhe, et al., "Added Sugar Intake and Cardiovascular Diseases Mortality Among US Adults," *JAMA*, at E4-5 (pub. online, Feb. 3, 2014).

[60] *Id.* at E6.

[61] *Id.* at E8.

calories, or 70 grams of sugar or more) had a 35% greater risk of coronary heart disease compared with infrequent consumers.[62]

60. In another prospective cohort study, it was suggested that reducing sugar consumption in liquids is highly recommended to prevent CHD. Consumption of sugary beverages was significantly shown to increase risk of CHD, as well as adverse changes in some blood lipids, inflammatory factors, and leptin.[63]

61. Juice consumption is also associated with several CHD risk factors. For example, consumption of sugary beverages like juice has been associated with dyslipidemia,[64] obesity,[65] and increased blood pressure.[66]

D. Juice Consumption is Associated with Increased Risk of Obesity

62. Excess sugar consumption also leads to weight gain and obesity because insulin secreted in response to sugar intake instructs the cells to store excess energy as fat. This excess weight can then exacerbate the problems of excess sugar consumption, because excess fat, particularly around the waist, is in itself a primary cause of insulin resistance, another vicious cycle. Studies have shown that belly fat produces hormones and other substances that can cause insulin resistance, high blood pressure, abnormal cholesterol levels, and cardiovascular disease. And belly fat plays a part in the development of chronic inflammation in the body, which can cause damage over time without any signs or symptoms. Complex

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[62] Fung, T.T., et al., "Sweetened beverage consumption and risk of coronary heart disease in women." *Am. J. of Clin. Nutr.*, Vol. 89, pp. 1037-42 (Feb. 2009).

[63] Koning, L.D., et al., "Sweetened Beverage Consumption, Incident Coronary Heart Disease, and Biomarkers of Risk in Men."," *Circulation*, Vol. 125, pp. 1735-41 (2012).

[64] Elliott S.S., et al., "Fructose, weight gain, and the insulin resistance syndrome." *Am. J. Clin. Nutr.*, Vol. 76, No. 5, pp. 911-22 (2002).

[65] Faith, M.S., et al., "Fruit Juice Intake Predicts Increased Adiposity Gain in Children From Low-Income Families: Weight Status-by-Environment Interaction." *Pediatrics*, Vol. 118 (2006) ("Among children who were initially either at risk for overweight or overweight, increased fruit juice intake was associated with excess adiposity gain, whereas parental offerings of whole fruits were associated with reduced adiposity gain."); Schulze, M.B, et al., "Sugar-Sweetened Beverages, Weight Gain, and Incidence of Type 2 Diabetes in Young and Middle-Aged Women." *JAMA*, Vol. 292, No. 8, pp. 927-34 (2004); Ludwig, D.S., et al., "Relation between consumption of sugar-sweetened drinks and childhood obesity: a prospective, observational analysis." *Lancet*, Vol. 257, pp. 505-508 (2001); Dennison, B.A., et al., "Excess fruit juice consumption by preschool-aged children is associated with short stature and obesity." *Pediatrics*, Vol. 99, pp. 15-22 (1997).

[66] Hoare, E., et al., "Sugar- and Intense-Sweetened Drinks in Australia: A Systematic Review on Cardiometabolic Risk." *Nutrients*, Vol. 9, No. 10 (2017).

interactions in fat tissue draw immune cells to the area, which triggers low-level chronic inflammation. This in turn contributes even more to insulin resistance, type 2 diabetes, and cardiovascular disease.

63. Based on a meta-analysis of 30 studies between 1966 and 2005, Harvard researchers found "strong evidence for the independent role of the intake of sugar-sweetened beverages, particularly soda, in the promotion of weight gain and obesity in children and adolescents. Findings from prospective cohort studies conducted in adults, taken in conjunction with results from short-term feeding trials, also support a positive association between soda consumption and weight gain, obesity, or both."[67]

64. A recent meta-analysis by Harvard researchers evaluating change in Body Mass Index per increase in 1 serving of sugar-sweetened beverages per day found a significant positive association between beverage intake and weight gain.[68]

65. One study of more than 2,000 2.5-year-old children followed for 3 years found that those who regularly consumed sugar-sweetened beverages between meals had a 240% better chance of being overweight than non-consumers.[69]

66. An analysis of data for more than 50,000 women from the Nurses' Health Study during two 4-year periods showed that weight gain over a 4-year period was highest among women who increased their sugar-sweetened beverage consumption from 1 or fewer drinks per week, to 1 or more drinks per day (8.0 kg gain during the 2 periods), and smallest among women who decreased their consumption or maintained a low intake level (2.8 kg gain).[70]

67. A study of more than 40,000 African American women over 10 years had similar results. After adjusting for confounding factors, those who increased sugar-sweetened beverage intake from less than 1 serving per week, to more than 1 serving per day, gained the most weight (6.8 kg), while women who decreased their intake gained the least (4.1 kg).[71]

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[67] Malik, V.S., et al., "Intake of sugar-sweetened beverages and weight gain: a systematic review," *American Journal of Clinical Nutrition*, Vol. 84, 274-88 (2006).

[68] Malik, V.S., et al., "Sugar-sweetened beverages and BMI in children and adolescents: reanalyses of a meta-analysis," *American Journal of Clinical Nutrition*, Vol. 29, 438-39 (2009).

[69] Dubois, L., et al., "Regular sugar-sweetened beverage consumption between meals increases risk of overweight among preschool-aged children," *Journal of the American Dietetic Association*, Vol. 107, Issue 6, 924-34 (2007).

[70] Schulze, Diabetes in Young & Middle-Aged Women, *supra* n.47.

[71] Palmer, Diabetes in African American Women, *supra* n.49.

68. Experimental short-term feeding studies comparing sugar-sweetened beverages to artificially-sweetened beverages have illustrated that consumption of the former leads to greater weight gain. As demonstrated in the chart below, one 10-week trial involving more than 40 men and women demonstrated that the group that consumed daily supplements of sucrose (for 28% of total energy) increased body weight and fat mass, by 1.6 kg for men and 1.3 kg for women, while the group that was supplemented with artificial sweeteners lost weight—1.0 kg for men and 0.3 kg for women.[72]

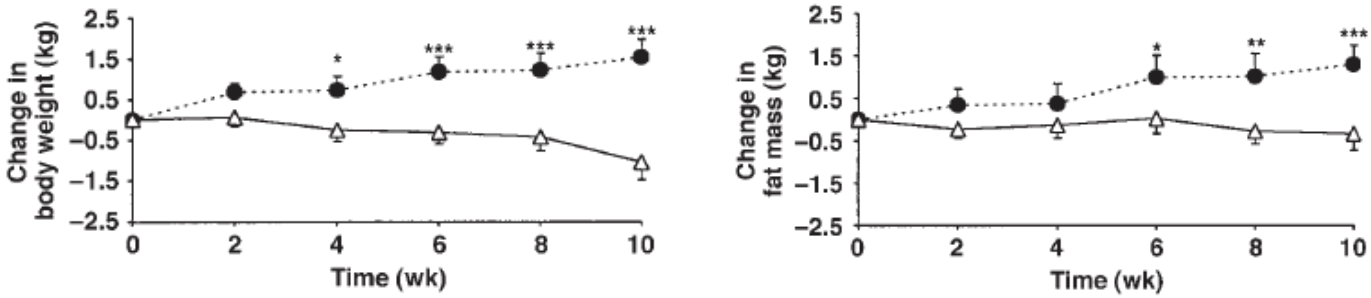

FIGURE 2. Mean (±SEM) changes in body weight, fat mass, and fat-free mass during an intervention in which overweight subjects consumed supplements containing either sucrose (●; $n = 21$) or artificial sweeteners (△; $n = 20$) daily for 10 wk. The diet × time interactions were significant for changes in body weight ($P < 0.0001$) and fat mass ($P < 0.05$) by analysis of variance with Tukey's post hoc tests. At specific time points for changes in body weight and fat mass, there were significant differences between the sucrose and sweetener groups: $^{*}P < 0.05$, $^{**}P < 0.001$, and $^{***}P < 0.0001$ (general linear model with least squares means and adjustment for multiple comparisons).

[72] Raben, A., et al., "Sucrose compared with artificial sweeteners: different effects on ad libitum food intake and body weight after 10 wk of supplementation in overweight subjects," *American Journal of Clinical Nutrition*, Vol. 76, 721-29 (2002) [hereinafter, "Raben, Sucrose vs. Artificial Sweeteners"].

E. Juice Consumption is Associated with Increased Risk of Liver Disease

69. Sugar consumption causes serious liver disease, including non-alcoholic fatty liver disease (NAFLD), characterized by excess fat build-up in the liver. Five percent of these cases develop into non-alcoholic steatohepatitis (NASH), scarring as the liver tries to heal its injuries, which gradually cuts off vital blood flow to the liver. About 25% of NASH patients progress to non-alcoholic liver cirrhosis, which requires a liver transplant or can lead to death.[73]

70. Since 1980, the incidence of NAFLD and NASH has doubled, along with the rise of fructose consumption, with approximately 6 million Americans estimated to have progressed to NASH and 600,000 to Nash-related cirrhosis. Most people with NASH also have type 2 diabetes. NASH is now the third-leading reason for liver transplant in America.[74]

71. Moreover, because the liver metabolizes sugar virtually identically to alcohol, the U.S. is now seeing for the first time alcohol-related diseases in children. Conservative estimates are that 31% of American adults, and 13% of American children suffer from NAFLD.[75]

F. Juice Consumption is Associated with Increased Risk of High Blood Triglycerides and Abnormal Cholesterol Levels

72. Cholesterol is a waxy, fat-like substance found in the body's cells, used to make hormones, bile acids, vitamin D, and other substances. The human body manufactures all the cholesterol it requires, which circulates in the bloodstream in packages called lipoproteins. Excess cholesterol in the bloodstream can become trapped in artery walls, building into plaque and narrowing blood vessels, making them less flexible, a condition called atherosclerosis. When this happens in the coronary arteries, it restricts oxygen

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[73] Farrell, G.C., et al., "Nonalcoholic fatty liver disease: from steatosis to cirrhosis," *Hepatology*, Vol. 433, No. 2 (Suppl. 1), S99-S112 (February 2006); Powell, E.E., et al., "The Natural History of Nonalcoholic Steatohepatitis: A Follow-up Study of Forty-two Patients for Up to 21 Years," *Hepatology*, Vol. 11, No. 1 (1990).

[74] Charlton, M.R., et al., "Frequency and outcomes of liver transplantation for nonalcoholic steatohepatitis in the United States," *Gastroenterology*, Vol. 141, No. 4, 1249-53 (October 2011).

[75] Lindback, S.M., et al., "Pediatric Nonalcoholic Fatty Liver Disease: A Comprehensive Review," *Advances in Pediatrics*, Vol. 57, No. 1, 85-140 (2010); Lazo, M. et al., "The Epidemiology of Nonalcoholic Fatty Liver Disease: A Global Perspective," *Seminars in Liver Disease*, Vol. 28, No. 4, 339-50 (2008); Schwimmer, J.B., et al., "Prevalence of Fatty Liver in Children and Adolescents," *Pediatrics*, Vol. 118, No. 4, 1388-93 (2006); Browning, J.D., et al., "Prevalence of hepatic steatosis in an urban population in the United States: Impact of ethnicity," *Hepatology*, Vol. 40, No. 6, 1387-95 (2004).

and nutrients to the heart, causing chest pain or angina. When cholesterol-rich plaques in these arteries burst, a clot can form, blocking blood flow and causing a heart attack.

73. Most blood cholesterol is low-density lipoprotein, or LDL cholesterol, which is sometimes called "bad" cholesterol because it carries cholesterol to the body's tissues and arteries, increasing the risk of heart disease. High-density lipoprotein, or HDL cholesterol, is sometimes called "good" cholesterol because it removes excess cholesterol from the cardiovascular system, bringing it to the liver for removal. Thus, a low level of HDL cholesterol increases the risk of heart disease.

74. Diet affects blood cholesterol. For example, the body reacts to saturated fat by producing LDL cholesterol.

75. When the liver is overwhelmed by large doses of fructose, it will convert excess to fat, which is stored in the liver and then released into the bloodstream, contributing to key elements of metabolic syndrome, like high blood fat and triglycerides, high total cholesterol, and low HDL "good" cholesterol.[76]

76. A study of more than 6,000 participants in the Framingham Heart Study found those who consumed more than 1 soft drink per day had a 25% greater risk of hypertriglyceridemia, and 32% greater risk of low HDL cholesterol than those who consumed less than 1 soft drink per day.[77]

77. A systematic review and meta-analysis of 37 randomized controlled trials concerning the link between sugar intake and blood pressure and lipids found that higher sugar intakes, compared to lower sugar intakes, significantly raised triglyceride concentrations, total cholesterol, and low density lipoprotein cholesterol.[78]

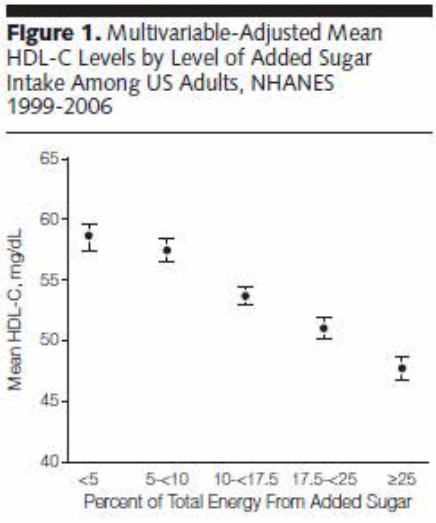
78. A cross-sectional study among more than 6,100 U.S. adults from the NHANES 1999-2006 data were grouped into quintiles for sugar intake as follows: (1) less than 5% of calories consumed from sugar, (2) 5% to less than 10%, (3) 10% to less than 17.5%, (4) 17.5% to less than 25%, and (5) 25% or more. These groups had the following adjusted mean HDL levels (because HDL is the "good" cholesterol, higher levels are better): 58.7 mg/dL, 57.5, 53.7, 51.0, and 47.7. Mean triglyceride levels were 105 mg/dL, 102, 111, 113, and 114. Mean LDL levels were 116 mg/dL, 115, 118, 121, and 123 among women, with no

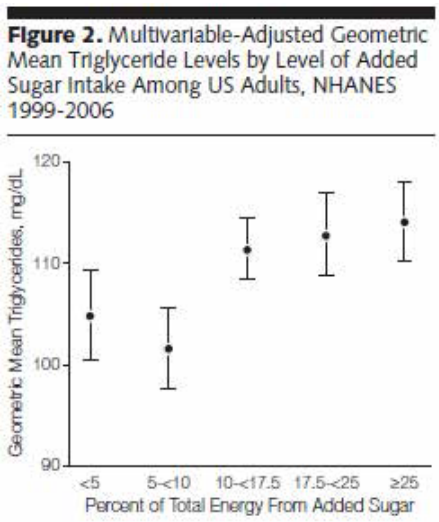
[76] Te Morenga, Dietary Sugars & Body Weight, *supra* n.37.

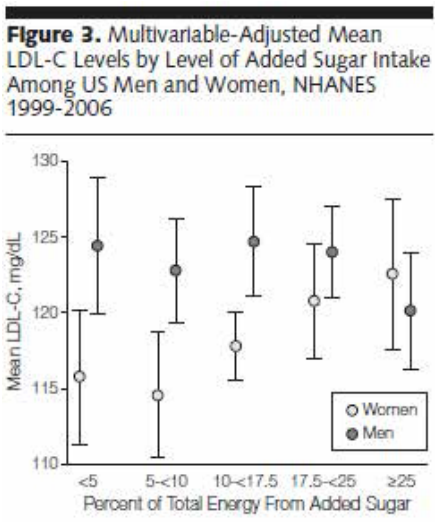
[77] Dhingra, Cardiometabolic Risk, *supra* n.41.

[78] Te Morenga, L., et al., "Dietary sugars and cardiometabolic risk: systematic review and meta-analyses of randomized controlled trials on the effects on blood pressure and lipids," *American Journal of Clinical Nutrition*, Vol. 100, No. 1, 65-79 (May 7, 2014).

significant trend among men. Consumers whose sugar intake accounted for more than 10% of calories had a 50% - 300% higher risk of low HDL levels compared to those who consumed less than 5% of calories from sugar. Likewise, high-sugar consumers had greater risk of high triglycerides. All relationships were linear as demonstrated in the charts below.[79]







79. One experimental study showed that, when a 17% fructose diet was provided to healthy men, they showed an increase in plasma triacylglycerol concentrations of 32%.[80]

80. Another 10-week experimental feeding study showed that those who were fed 25% of their energy requirements as fructose experienced increases in LDL cholesterol, small dense LDL cholesterol, and oxidized LDL cholesterol, as well as increased concentrations of triglycerides and total cholesterol, while those fed a 25% diet of glucose did not experience the same adverse effects.[81]

[79] Welsh, J.A., et al., "Caloric Sweetener Consumption and Dyslipidemia Among US Adults," *Journal of the American Medical Association*, Vol. 303, No. 15, 1490-97 (April 21, 2010).

[80] Bantle, J.P., et al., "Effects of dietary fructose on plasma lipids in healthy subjects," *American Journal of Clinical Nutrition*, Vol. 72, 1128-34 (2000).

[81] Stanhope, K.L., et al., "Consuming fructose-sweetened, not glucose-sweetened, beverages increases visceral adiposity and lipids and decreases insulin sensitivity in overweight/obese humans," *The Journal of Clinical Investigation*, Vol. 119, No. 5, 1322-34 (May 2009).

81. In a cross-sectional study of normal weight and overweight children aged 6-14, researchers found that "the only dietary factor that was a significant predictor of LDL particle size was total fructose intake."[82]

G. Juice Consumption is Associated with Increased Risk of Hypertension

82. An analysis of the NHANES data for more than 4,800 adolescents also showed a positive, linear association between sugar-sweetened beverages and higher systolic blood pressure, as well as corresponding increases in serum uric acid levels.[83]

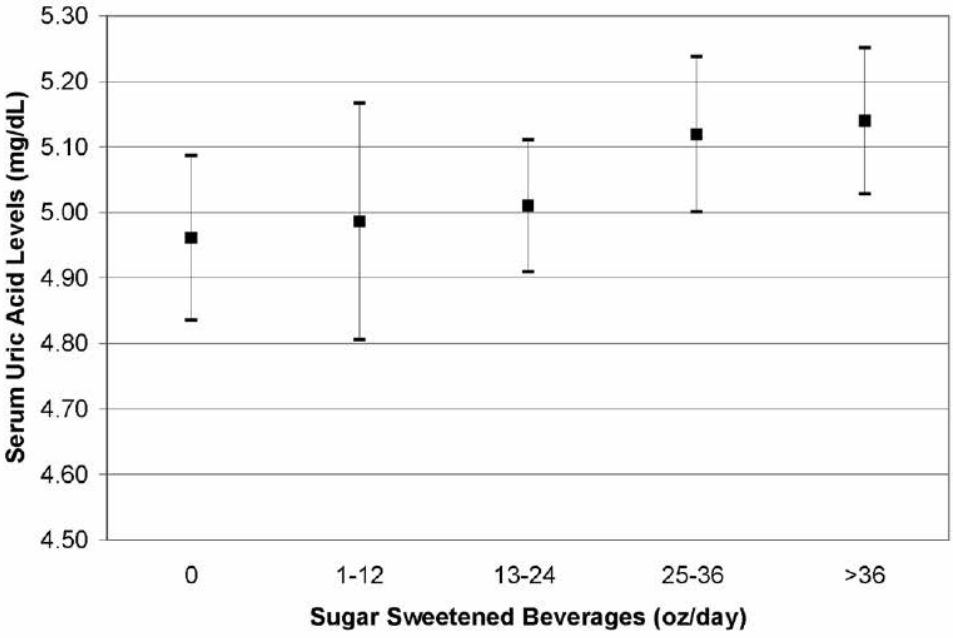


Figure 1.
Sample mean of serum uric acid with 95% confidence intervals by categories of sugar sweetened beverage consumption adjusted for age, race/ethnicity, sex, total calories, BMI z-score, alcohol, smoking, dietary fiber intake, diet beverage consumption, and milk consumption. *P* for trend = 0.01

[82] Aeberli, I., et al., "Fructose intake is a predictor of LDL particle size in overweight schoolchildren," *American Journal of Clinical Nutrition*, Vol. 86, 1174-78 (2007).

[83] Nguyen, S., et al., "Sugar Sweetened Beverages, Serum Uric Acid, and Blood Pressure in Adolescents," *Journal of Pediatrics*, Vol. 154, No. 6, 807-13 (June 2009).

83. In one study, 15 healthy men drank 500 ml water containing either no sugar, 60 grams of fructose, or 60 grams of glucose. Blood pressure, metabolic rate, and autonomic nervous system activity were measured for 2 hours. While the administration of fructose was associated with an increase in both systolic and diastolic blood pressure, blood pressure did not rise in response to either water or glucose ingestion, as demonstrated in the chart below.[84]

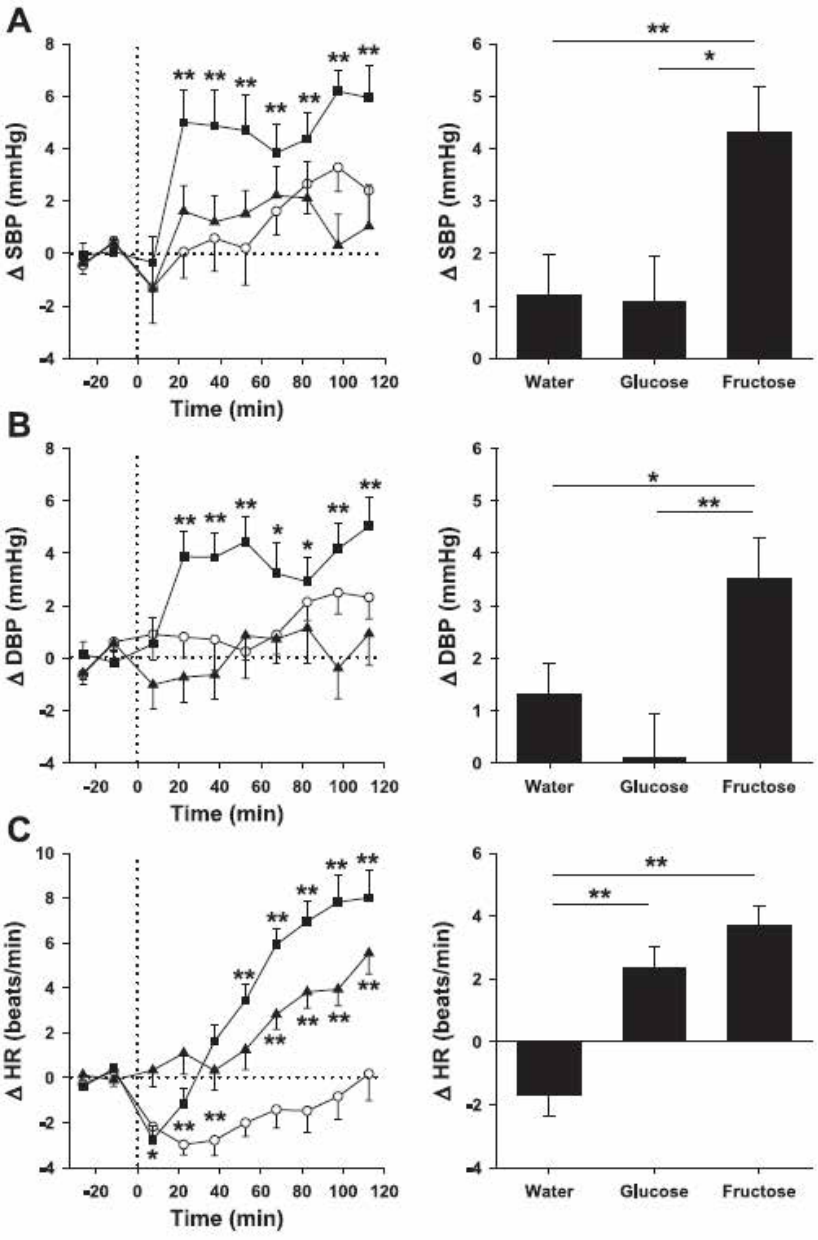


Fig. 1. Time course of the systolic blood pressure (SBP; *A*), diastolic blood pressure (DBP; *B*), and heart rate (HR; *C*) changes (*left*) and mean responses (*right*) to drinking water (○), glucose (▲), and fructose (■). $*P < 0.05$ and $**P < 0.01$, statistically significant differences over time from baseline values (*left*) and differences between responses to the drinks (*right*).

[84] Brown, C.M., et al., "Fructose ingestion acutely elevates blood pressure in healthy young humans," *Am. J. Physiol. Regul. Integr. Compl. Physiol.*, Vol. 294, R730-37 (2008).

84. In another study, more than 40 overweight men and women were supplemented for 10 weeks with either sucrose or artificial sweeteners. The sucrose group saw an increase in systolic and diastolic blood pressure, of 3.8 and 4.1 mm Hg, respectively, while the artificial sweetener group saw a decrease in systolic and diastolic blood pressure, of 3.1 and 1.2 mm Hg, respectively.[85]

85. Another study took a variety of approaches to measuring the association between sugar intake and blood pressure, concluding that an increase of 1 serving of sugar-sweetened beverages per day (*i.e.*, 140-150 calories, and 35-37.5 grams of sugar) was associated with systolic/diastolic blood pressure differences of +1.6 and +0.8 mm Hg (and +1.1/+0.4 mm Hg with adjustment for height and weight), while an increase of 2 servings results in systolic/diastolic blood pressure differences of +3.4/+2.2, demonstrating that the relationship is direct and linear.[86]

H. Juice Consumption is Associated with Increased All-Cause Mortality

86. In a cohort study of 13,440 black and white adults 45 years and older, observed for a mean of 6 years, each additional 12-oz serving per day of fruit juice was associated with a 24% higher all-cause mortality risk. This was significantly higher than the increased risk associated with *all* sugary beverages, including sugar-sweetened beverages like soda, which was 11% for each additional 12-oz serving per day. The researchers from Emory University, University of Alabama, and the Weill Cornell Medical College concluded their findings "suggest that consumption of sugary beverages, including fruit juices, is associated with all-cause mortality."[87]

IV. Because of the Compelling Evidence that Consuming Juice is Unhealthy, Authoritative Bodies Recommend Limiting its Consumption

87. The American Academy of Pediatrics (AAP) suggests limiting juice consumption to no more than 4 to 6 ounces for young children aged 1 to 6,[88] and no more than 8 fluid ounces for children 7 to 18

[85] Raben, Sucrose vs. Artificial Sweeteners, *supra* n.72.

[86] Brown, I.J., et al., "Sugar-Sweetened Beverage, Sugar Intake of Individuals, and Their Blood Pressure: International Study of Macro/Micronutrients and Blood Pressure," *Hypertension*, Vol. 57, 695-701 (2011).

[87] Collin, L.J., et al., "Association of Sugary Beverage Consumption With Mortality Risk in US Adults: A Secondary Analysis of Data From the REGARDS Study," *JAMA Network Open* Vol. 2, No. 5 (May 2019).

[88] Am. Academy of Pediatrics, "Healthy Children, Fit Children: Answers to Common Questions From Parents About Nutrition and Fitness." (2011).

years of age, as well as adults.[89] In addition, both the AAP and Dietary Guidelines for Americans recommend that children consume whole fruit in place of juice.[90]

88. The most recent Dietary Guidelines for Americans states that "[t]he amounts of fruit juice allowed in the USDA Food Patterns for young children align with the recommendation from the American Academy of Pediatrics that young children consume no more than 4 to 6 fluid ounces of 100% fruit juice per day."[91]

89. The World Health Organization recommends that no more than 10% of an adult's calories, and ideally less than 5%, come from free or added sugar, or from natural sugars in honey, syrups, and fruit juice.

V. NEXTFOODS' REPRESENTATIONS AND OMISSIONS SUGGESTING THE JUICEDRINKS ARE HEALTHY ARE FALSE AND MISLEADING

90. For more than four years preceding the filing of this Complaint and continuing today, NextFoods has sold and continues to sell the JuiceDrinks on a nationwide basis, including in New York, in at least 32 ounce and 15.2 ounce sizes, and in various flavors.

91. The JuiceDrinks' standard serving size is 8 fl. oz (1 cup).[92] Each serving, depending on flavor, contains between 9g and 21g of free sugar, contributing 60% to 88% of its calories.

92. Because scientific evidence demonstrates that consuming foods high in free sugar content, like the JuiceDrinks, harms digestive health, NextFoods' representations that the JuiceDrinks promote digestive or gut health are false, or at least highly misleading.

93. To the extent the JuiceDrinks probiotics may provide some benefits to "digestive health"—like the mitigation of "Flatulence," "Diarrhea," and "Constipation," as set out on the JuiceDrinks' labels, it

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[89] Heyman, M.B., et al., "Fruit Juice in Infants, Children, and Adolescents: Current Recommendations." *Pediatrics* Vol. 139, No. 6 (June 2017).

[90] *Id.*; *see also* Auerbach, B.J., et al., "Review of 100% Fruit Juice and Chronic Health Conditions: Implications for Sugar-Sweetened Beverage Policy." *Adv. Nutr.*, Vol. 9, pp. 78-85 (2018).

[91] U.S. Dep't of Health & Human Servs. and U.S. Dept. of Agric., "Dietary Guidelines for Americans 2015 – 2020," at 22 (8th ed.), *available at* https://health.gov/sites/default/files/2019-09/2015-2020_Dietary_Guidelines.pdf.

[92] This is also the FDA-promulgated Reference Amount Customarily Consumed (RACC) for juice. 81 Fed. Reg. 34,000 (May 27, 2016). RACCs reflect amounts of food customarily consumed per eating occasion and are derived from NHANES data.

is nevertheless deceptive for NextFoods to advertise the products as promoting digestive health since regular consumption of the JuiceDrinks actually is likely to detriment digestive health.

94. Because scientific evidence demonstrates that, due to its high free sugar content, juice consumption is associated with increased risk of metabolic disease, cardiovascular disease, type 2 diabetes, liver disease, obesity, high blood triglycerides and cholesterol, hypertension, and all-cause mortality, NextFoods' representations that the JuiceDrinks promote "overall health" and "GoodHealth," are healthy, are false, or at least highly misleading.

95. While representing that the JuiceDrinks promote digestive health, NextFoods regularly and intentionally omits material information regarding the dangers of the free sugars in the JuiceDrinks and the harm to digestive health that they cause. NextFoods is under a duty to disclose this information to consumers because (a) NextFoods is revealing some information about its Products—enough to suggest they are beneficial to digestive health—without revealing additional material information, (b) NextFoods deceptive omissions concern human health, and specifically the detrimental digestive health consequences of consuming its Products, (c) NextFoods was in a superior position to know of the dangers presented by the sugars in its juices, as it is a food company whose business depends upon food science and policy, and (d) NextFoods actively concealed material facts not known to Plaintiff and the Class.

96. While representing that the JuiceDrinks promote "overall health" and "GoodHealth," NextFoods regularly and intentionally omits material information regarding the dangers of the free sugars in the JuiceDrinks. NextFoods is under a duty to disclose this information to consumers because (a) NextFoods is revealing some information about its Products—enough to suggest they are healthy or beneficial to health—without revealing additional material information, (b) NextFoods deceptive omissions concern human health, and specifically the detrimental health consequences of consuming its Products, (c) NextFoods was in a superior position to know of the dangers presented by the sugars in its juices, as it is a food company whose business depends upon food science and policy, and (d) NextFoods actively concealed material facts not known to Plaintiff and the Class.

III. THE JUICEDRINKS' LABELING VIOLATES NEW YORK AND FEDERAL LAW

97. "New York . . . broadly prohibit[s] the misbranding of food in language largely identical to that found in the FDCA." *Ackerman v. Coca-Cola Co.*, 2010 WL 2925955, at *4 (E.D.N.Y. July 21, 2010). "New York's Agriculture and Marketing law . . . incorporates the FDCA's labeling provisions found in 21 C.F.R. part 101." *Ackerman*, 2010 WL 2925955, at *4 (citing N.Y. Comp. Codes R. & Regs. tit. 1, § 259.1).

98. The JuiceDrinks and their challenged labeling statements violate the FDCA and its New York state law equivalent.

99. First, the challenged claims are false and misleading for the reasons described herein, in violation of 21 U.S.C. § 343(a), which deems misbranded any food whose "label is false or misleading in any particular." NextFoods accordingly also violated New York's parallel provision of the Agriculture and Marketing law. *See* N.Y. Agric. Mkts. Law § 201.

100. Second, despite making the challenged claim, NextFoods "fail[ed] to reveal facts that are material in light of other representations made or suggested by the statement[s], word[s], design[s], device[s], or any combination thereof," in violation of 21 C.F.R. § 1.21(a)(1). Such facts include the detrimental health consequences of consuming the JuiceDrinks at typical levels, including (1) harm to the digestive system that can cause chronic digestive track diseases such as ulcerative colitis, Crohn's disease, celiac disease and irritable bowel syndrome and (2) increased risk of other chronic diseases such as metabolic disease, cardiovascular disease, type 2 diabetes, liver disease, obesity, high blood triglycerides and cholesterol, hypertension, and death.

101. Third, NextFoods failed to reveal facts that were "[m]aterial with respect to the consequences which may result from use of the article under" both "[t]he conditions prescribed in such labeling," and "such conditions of use as are customary or usual," in violation of § 1.21(a)(2). Namely, NextFoods failed to disclose the harm to the digestive system that can cause chronic digestive track diseases and increased risk of other serious chronic diseases that is likely to result from the usual consumption of the JuiceDrinks in the customary and prescribed manners.

IV. PLAINTIFF'S PURCHASE, RELIANCE, AND INJURY

102. As best she can recall, Plaintiff started purchasing 32 oz. cartons of the JuiceDrinks in 2019, and continued to purchase the products until around the 2022. She recalls making her purchases at local stores including the Wegmans located 3955 Route 31, Liverpool, NY 13090, for approximately $3 to $5 per carton.

103. In purchasing the JuiceDrinks, Plaintiff was exposed to, read, and relied upon NextFoods' labeling claims that were intended to appeal to consumers, like her, interested in health and nutrition. Specifically, to the best of her recollection, when deciding to purchase the JuiceDrinks, Plaintiff at various times read and relied on at least the following statements on the products' packaging:

a. "START YOUR GOODHEALTH GAME PLAN . . . Drink one 8 oz. glass of delicious GoodBelly a day for 12 days.";

b. "Reboot your belly, then make GoodBelly your daily drink to keep your GoodHealth going. Because when your belly smiles the rest of you does too";

c. "WE DIG SCIENCE. LP299V is naturally occurring in the human gut. It has been studied more than 2 decades and has numerous research trials to show that it may help promote healthy digestion and overall wellness"; and

d. "GoodBelly Probiotics is a delicious blend of fruit juices and a daily dose of probiotic cultures created to naturally renew your digestive health, right where your overall health gets started – in your belly."

104. Plaintiff believed these claims regarding digestive health and overall health of, which were and are deceptive because they convey that the products promote digestive and overall health and will not detriment digestive or overall health, despite that they contain excessive amounts of free sugar, which harms digestive health and is likely to increase risk of other diseases when consumed regularly.

105. When purchasing the JuiceDrinks, Plaintiff was seeking beverages that were beneficial to digestive and overall health when consumed, that is, whose regular consumption would not harm her digestive health or increase her risk of disease.

106. The digestive health and overall wellness representations on the JuiceDrinks' packaging, however, were misleading, and had the capacity, tendency, and likelihood to confuse or confound Plaintiff and other consumers acting reasonably. This is because, as described in detail herein, the Products actually harm digestive health and are likely to increase the risk of digestive health issues and other chronic diseases when regularly consumed.

107. Plaintiff is not a nutritionist, food expert, or food scientist, but rather a lay consumer who did not have the specialized knowledge that NextFoods had regarding the nutrients present in its JuiceDrinks. At the time of purchase, Plaintiff was unaware of the extent to which consuming high amounts of free sugar, like that in the JuiceDrinks, adversely affects digestive health, blood glucose and cholesterol levels, and increases inflammation. She was also unaware of what amount of free sugar might have such an effect. She also did not know the extent to which consuming high amounts of free sugar, like that in the JuiceDrinks, increases risk of chronic digestive diseases and increases risk of metabolic disease, liver disease, heart disease, diabetes, and other morbidity. She also did not know what amount of free sugar might have such an effect.

108. The average and reasonable consumer is unaware that or at least the extent to which consuming high amounts of free sugar, like that in the JuiceDrinks, adversely affects digestive health, blood glucose and cholesterol levels, and increases inflammation. The reasonable consumer is also unaware what amount of free sugar might have such an effect. The average and reasonable consumer is unaware that or at least the extent to which consuming high amounts of free sugar, like that in the JuiceDrinks, increases risk of chronic digestive diseases and increases risk of metabolic disease, liver disease, heart disease, diabetes, and other morbidity. The average or reasonable consumer is also unaware of what amount of free sugar might have such an effect.

109. Numerous studies demonstrate that the mandatory nutrition facts are not sufficient to allow consumers to make accurate assessments of the healthfulness of foods and beverages.

110. To start, "[m]any consumers have difficulty interpreting nutrition labels[.]" In fact, the "mandated nutrition labels have been criticized for being too complex for many consumers to understand and use."[93] "Understanding the NFP label requires health literacy, that is, 'the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.' However, a sizable proportion of the US population is deficient in health literacy."[94]

111. For example, "[t]he 2003 National Assessment of Adult Literacy found that more than one-third of the US population had only basic or below-basic health literacy, meaning they would have difficulty viewing the nutrition labels of 2 different potato chip packages and determining the difference in the number

[93] Persoskie A, Hennessy E, Nelson WL, "US Consumers' Understanding of Nutrition Labels in 2013: The Importance of Health Literacy," 14 *Prev. Chronic Dis.* 170066 (2017).

[94] *Id.*

of calories."[95] And other "studies have found that even high school graduates and college students lack the basic health literacy skills to effectively apply nutrition label information."[96]

112. While it may be unfortunate, the most consumers "ability to interpret nutrition label information [is] poor" and "[e]ven a college education did not ensure nutrition label understanding."[97]

113. In short, "[a] substantial proportion of consumers in this country, including those with a college education, have difficulty understanding NFP labels, which is likely a function of limited health literacy."[98]

114. Not only does the reasonable consumer have difficulty using the nutrition facts panel deciding if a food or beverage is healthy or unhealthy is complex and the most consumers have difficulty accurately assessing the healthfulness of such products.

115. This has been studied and found to be true in regard to sugar containing beverages. Specifically, even though one may understand a drink is high in sugar and have some notion that sugar can be harmful, many nevertheless still view such products as overall being healthful when there is a health or nutritional claim made on a label.

116. In one study, for example, "[w]hile participants were aware that beverages can contain high amounts of sugar, and that this can be harmful to health, many other factors influence the perceptions of beverage healthfulness *and these can outweigh the perceived harms of consumption*."[99]

117. In fact, "research indicates that consumers hold erroneous views about the healthfulness of certain sugar-containing beverages. For example, previous research has indicated that beverages such as juice, flavoured waters, sports drinks (e.g. Gatorade) and iced teas, are perceived to be healthy, or healthier, and as less likely to lead to disease development, compared to soda (or 'soft drink' e.g. Coca-Cola; Sprite) or energy drinks (e.g. Red Bull)."[100]

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[95] *Id.*

[96] *Id.*

[97] *Id.*

[98] *Id.*

[99] Aimee L. Brownbill et al., "What makes a beverage healthy? A qualitative study of young adults' conceptualisation of sugar-containing beverage healthfulness," 150 *Appetite* 104675 (2020).

[100] *Id.*

118. In one study, "sugar content, nutritional value, naturalness and functionality were important factors participants considered in their conceptualisation of beverage healthfulness. Participants suggested that sugar content was a primary indicator of how healthy a beverage was *but lacked knowledge about the amount of sugar in beverages, and how much should be considered harmful for health*."[101]

119. Crucially, "[m]any participants perceived juice to be a healthier option. Juices were viewed by some participants as equating to fruit consumption or as providing important nutrients to the consumer. While it was common for participants to identify that juice contained sugar, the perceived nutritional benefits appeared to offset concerns about sugar content for some participants."[102]

120. In addition, "[b]everages that were perceived as having added nutrients were seen as healthier. Nutritional value appeared to be particularly relevant to participants' ranking of the relative healthfulness of beverages."[103]

121. Likewise, if a beverage purported to provide a functional benefit, "that functionality of beverages may negate concern about sugar content."[104]

122. Unfortunately, "research has similarly shown that consumers often focus more on added nutrients than unhealthy ingredients and that added nutrients can be seen to counteract the effect of unhealthy ingredients."[105]

123. In short, "health-related marketing . . . may mislead consumers to more positively assess the healthfulness of sugar-containing beverages."[106]

124. That health positioning may mislead consumers is no secret to marketers as there is a wealth of research showing that all sorts of health related representations may mislead consumers to believe a product is healthier than it is—despite them being aware of the sugar content.

125. For example, "[n]utrient content claims may lead consumers to mistakenly infer that a product is healthful, regardless of its overall nutritional profile (i.e., the "health halo effect") and can subsequently

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[101] *Id.*

[102] *Id.*

[103] *Id.*

[104] *Id.*

[105] *Id.*

[106] *Id.*

increase intentions to purchase the product (Roe et al., 1999; Choi et al., 2013; Schuldt and Schwarz, 2010; Kaur et al., 2017; Talati et al., 2017)."[107]

126. Likewise, "research that has found that health-related and nutrient content claims make food and beverages seem healthier and more appealing (Roe et al., 1999; Choi et al., 2013; Schuldt and Schwarz, 2010; Kaur et al., 2017; Talati et al., 2017; Fernan et al., 2018)."[108]

127. Health positioning claims also have the specific effect of "decreas[ing] perceptions of the presence of certain less healthful nutrients."[109]

128. And the presence of such claims make consumers "1) less likely to look for nutrition information on the Nutrition Facts label, 2) more likely to select the product for purchase, 3) more likely to perceive the product as healthier, and 4) less likely to correctly choose the healthier product."[110]

129. One study meant to test consumers ability to determine which of six snack products were the healthiest, found that "[o]nly 9% of Americans could identify the *healthiest* cereal bar," and "81% wrongly identified the healthiest choice."[111]

130. This data shows that identifying real, healthy products appears to be a serious difficulty for American shoppers.[112]

131. Plaintiff acted reasonably in relying on the challenged labeling claims, which NextFoods intentionally placed on the JuiceDrinks' labeling with the intent to induce average consumers into purchasing the products.

132. Plaintiff would not have purchased the JuiceDrinks if she knew that the labeling claims were false and misleading in that the products do not provide the claimed benefits and actually harm digestive and overall health.

133. The JuiceDrinks cost more than similar products without misleading labeling, and would have cost less absent NextFoods' false and misleading statements and omissions.

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[107] *Id.*

[108] *Id.*

[109] Linda Verrill et al., "Vitamin-Fortified Snack Food May Lead Consumers to Make Poor Dietary Decisions, Journal of the Academy of Nutrition and Dietetics," 117:3, 376-385 (2017).

[110] *Id.*

[111] *Id.*

[112] *Id.*

134. Through the misleading labeling claims and omissions, NextFoods was able to gain a greater share of the juice market than it would have otherwise and also increased the size of the market.

135. Plaintiff paid more for the JuiceDrinks, and would only have been willing to pay less, or unwilling to purchase the JuiceDrinks at all, absent the false and misleading labeling complained of herein.

136. Plaintiff would not have purchased the JuiceDrinks if she had known that the Products were misbranded pursuant to New York and FDA regulations or that the challenged claims were false or misleading.

137. For these reasons, the JuiceDrinks were worth less than what Plaintiff and the Class paid for them.

138. Instead of receiving products that had actual healthful qualities, the JuiceDrinks Plaintiff and the Class received were of the type that harms digestive health and increases risk of chronic diseases.

139. Plaintiff and the Class lost money as a result of NextFoods' deceptive claims, omissions, and practices in that they did not receive what they paid for when purchasing the JuiceDrinks.

CLASS ACTION ALLEGATIONS

140. While reserving the right to redefine or amend the class definition prior to or as part of a motion seeking class certification, pursuant to Federal Rule of Civil Procedure 23, Plaintiff seeks to represent a class of all persons in the United States, and separately Subclasses of all persons in New York, who, at any time from three years preceding the date of the filing of this Complaint to the time a class is notified (the "Class Period"), purchased, for personal or household use, and not for resale or distribution, any of the JuiceDrinks (the "Class").

141. The members in the proposed Class, and each subclass, are so numerous that individual joinder of all members is impracticable, and the disposition of the claims of all Class Members in a single action will provide substantial benefits to the parties and Court.

142. Questions of law and fact common to Plaintiff and the Class include:

a. whether NextFoods communicated a message regarding digestive and overall healthfulness of the Products through its packaging and advertising;

b. whether those messages were material, or likely to be material, to a reasonable consumer;

c. whether the challenged claims are false, misleading, or reasonably likely to deceive a reasonable consumer;

d. whether NextFoods' conduct violates public policy;

e. whether NextFoods' conduct violates state or federal food statutes or regulations;

f. the proper amount of actual, statutory, and punitive damages;

g. the proper amount of restitution;

h. the proper scope of injunctive relief; and

i. the proper amount of attorneys' fees.

143. These common questions of law and fact predominate over questions that affect only individual Class Members.

144. Plaintiff's claims are typical of Class Members' claims because they are based on the same underlying facts, events, and circumstances relating to NextFoods' conduct. Specifically, all Class Members, including Plaintiff, were subjected to the same misleading and deceptive conduct when they purchased the JuiceDrinks and suffered economic injury because the products are misrepresented. Absent NextFoods' business practice of deceptively and unlawfully labeling the JuiceDrinks, Plaintiff and Class Members would not have purchased the products.

145. Plaintiff will fairly and adequately represent and protect the interests of the Class, has no interests incompatible with the interests of the Class, and has retained counsel competent and experienced in class action litigation, and specifically in litigation involving the false and misleading advertising of foods.

146. Class treatment is superior to other options for resolution of the controversy because the relief sought for each Class Member is small, such that, absent representative litigation, it would be infeasible for Class Members to redress the wrongs done to them.

147. NextFoods has acted on grounds applicable to the Class, thereby making appropriate declaratory relief concerning the Class as a whole.

148. As a result of the foregoing, class treatment is appropriate under Fed. R. Civ. P. 23(a), and 23(b)(3).

149. Plaintiff's claims are typical of Class Members' claims because they are based on the same underlying facts, events, and circumstances relating to NextFoods' conduct. Specifically, all Class Members, including Plaintiff, were subjected to the same misleading and deceptive conduct when they purchased the JuiceDrinks and suffered economic injury because the Products are misrepresented. Absent NextFoods' business practice of deceptively and unlawfully labeling the JuiceDrinks, Plaintiff and Class Members would not have purchased them or would have paid less for them.

150. Plaintiff will fairly and adequately represent and protect the interests of the Class, has no interests incompatible with the interests of the Class, and has retained counsel competent and experienced in class action litigation, and specifically in litigation involving the false and misleading advertising of foods and beverages.

151. Class treatment is superior to other options for resolution of the controversy because the relief sought for each Class Member is small, such that, absent representative litigation, it would be infeasible for Class Members to redress the wrongs done to them.

152. NextFoods has acted on grounds applicable to the Class, thereby making appropriate final injunctive and declaratory relief concerning the Class as a whole.

153. As a result of the foregoing, class treatment is appropriate under Fed. R. Civ. P. 23(a), 23(b)(2), and 23(b)(3).

CAUSES OF ACTION

FIRST CAUSE OF ACTION

Unfair and Deceptive Business Practices, N.Y. Gen. Bus. L. § 349

154. Plaintiff realleges and incorporates the allegations elsewhere in the Complaint as if fully set forth herein.

155. NextFoods' conduct constitutes deceptive acts or practices or false advertising in the conduct of business, trade, or commerce or in the furnishing of services in New York which affects the public interest under N.Y. Gen. Bus. L. § 349.

156. As alleged herein, NextFoods engaged in, and continues to engage in, deceptive acts and practices by advertising, marketing, distributing, and selling the JuiceDrinks with false or misleading claims and representations, and deceptive omissions.

157. As alleged herein, by misbranding the JuiceDrinks, NextFoods engaged in, and continues to engage in, unlawful and deceptive acts and practices.

158. NextFoods' conduct was materially misleading to Plaintiff and the Class. During the Class Period, NextFoods carried out a plan, scheme and course of conduct which was consumer oriented.

159. As a direct and proximate result of NextFoods' violation of N.Y. Gen. Bus. L. § 349, Plaintiff and the Class were injured and suffered damages.

160. The injuries to Plaintiff and the Class were foreseeable to NextFoods and, thus NextFoods' actions were unconscionable and unreasonable.

161. NextFoods is liable for damages sustained by Plaintiff and the Class to the maximum extent allowable under N.Y. Gen. Bus. L. § 349, actual damages or $50 per unit, whichever is greater.

162. Pursuant to N.Y. Gen. Bus. L. § 349(h), Plaintiff and the Class seek an Order enjoining NextFoods from continuing to engage in unlawful acts or practices, false advertising, and any other acts prohibited by law, including those set forth in this Complaint.

SECOND CAUSE OF ACTION

False Advertising, N.Y. Gen. Bus. L. § 350

163. Plaintiff realleges and incorporates the allegations elsewhere in the Complaint as if fully set forth herein.

164. NextFoods has engaged and is engaging in consumer-oriented conduct which is deceptive or misleading in a material way (both by affirmative misrepresentations and by material omissions), constituting false advertising in the conduct of any business, trade, or commerce, in violation of N.Y. Gen. Bus. L. § 350.

165. As a result of NextFoods' false advertising, Plaintiff and the Class Members have suffered and continue to suffer substantial injury, including damages, which would not have occurred but for the false and deceptive advertising, and which will continue to occur unless NextFoods is permanently enjoined by this Court.

166. Plaintiff and the Class seek to enjoin the unlawful acts and practices described herein, and to recover their actual damages or $500 per unit, whichever is greater, and reasonable attorney fees.

THIRD CAUSE OF ACTION

Negligent Misrepresentation

167. Plaintiff realleges and incorporates the allegations elsewhere in the Complaint as if fully set forth herein.

168. NextFoods marketed the JuiceDrinks in a manner conveying to reasonable consumers that the Products promote digestive health as well as general health and wellness.

169. NextFoods' misrepresentations regarding the JuiceDrinks are material to a reasonable consumer because they relate to human health, both generally and specifically to digestive health. Reasonable consumers would attach importance to such representations and would be induced to act thereon in making purchase decisions.

170. In selling the JuiceDrinks, NextFoods acted in the ordinary course of its business and had a pecuniary interest in Plaintiff and Class Members purchasing the JuiceDrinks.

171. NextFoods owed a duty of care to Plaintiff, not to provide her false information when she was making her purchase decisions regarding the JuiceDrinks.

172. Through the labeling of the JuiceDrinks and statements made on its website, Nextfoods held and continues to hold itself out as have specialized knowledge regarding probiotics, gut health and nutrition science, and specifically the effect of consuming the JuiceDrinks.

173. For example, on the JuiceDrinks' labeling NextFoods holds itself out as having scientific expertise through statements such as:

a. "Our strain LP299V has been recognized as one of the most researched and impactful probiotic strains available"; and

b. "We Dig Science LP299V is naturally occurring in the human gut. It has been studied for more than 2 decades and has numerous research trials to show it may help promote healthy digestion and overall wellness."

174. On its website, NextFoods further holds itself out as having scientific expertise regarding

nutrition and health. For example, it claims to be "founded by two Natural Foods industry veterans" that

> zeroed in on the sweet spot for the company's products — ingredients with scientifically substantiated health benefits combined with the goodness and responsibility of healthy, natural foods. NextFoods, Inc. was born. The vision was simple: Natural Foods + Science = Next Generation ("I Feel the Effect") Products (that would be delicious, of course)! Based in Boulder, Colorado, NextFoods adheres to a mission that fosters the continuous improvement of human nutrition. The NextFoods team is committed to developing a series of world-class, highly nutritious, functional, "next generation" foods — while using sustainable, socially responsible practices whenever possible
>
> Initially, the team's research into next generation foods led them to a probiotic strain called Lactobacillus plantarum 299v (LP299V®), a probiotic that has over two decades of demonstrated safe & effective use and has been subject to over 60 human clinical trials. GoodBelly, containing LP299V®, became the first probiotic juice drink to hit the U.S. market. GoodBelly chose this scientifically-backed strain from the very start because it has been shown to be one of the most effective probiotics on the market at supporting digestive health, which is where overall health begins.[113]

175. To further reinforce consumers' perception of NextFoods as an expert in nutrition science, its website also contains numerous "resources," which are simply marketing literature in the guise of science and evidence-based resources, like its FAQs, "Gut Health Guide," and other information on gut health and probiotics.

176. NextFoods knew or has been negligent in not knowing that consuming the JuiceDrinks did and does not promote digestive and overall health, but instead harms the digestive and overall health of the average consumer. NextFoods had no reasonable grounds for believing its misrepresentations were not false and misleading regarding overall health or digestive health.

177. NextFoods intends that Plaintiff and other consumers rely on these representations, as evidenced by the intentional and conspicuous placement of the misleading representations on the JuiceDrinks packaging by NextFoods.

178. Plaintiff and Class Members have reasonably and justifiably relied on NextFoods' misrepresentations when purchasing the JuiceDrinks, and had the correct facts been known, would not have purchased them at the prices at which they were offered.

[113] https://goodbelly.com/goodhealth/about-us/.

179. Therefore, as a direct and proximate result of NextFoods' negligent misrepresentations, Plaintiff and Class Members have suffered economic losses and other general and specific damages, in the amount of the JuiceDrinks' purchase prices, or some portion thereof, and any interest that would have accrued on those monies, all in an amount to be proven at trial.

FOURTH CAUSE OF ACTION

Intentional Misrepresentation

180. Plaintiff realleges and incorporates the allegations elsewhere in the Complaint as if set forth in full herein.

181. NextFoods marketed the JuiceDrinks in a manner conveying to reasonable consumers that the Products promote general health and wellness, as well as providing specific health benefits like digestive health. However, consuming sugar sweetened beverages like the JuiceDrinks harms, rather than supports the overall health of the average consumer and harms rather than supports digestive health. Therefore, NextFoods has made misrepresentations about the JuiceDrinks.

182. NextFoods' misrepresentations regarding the JuiceDrinks are material to a reasonable consumer because they relate to human health, both generally and specifically to digestive health. A reasonable consumer would attach importance to such representations and would be induced to act thereon in making purchase decisions.

183. At all relevant, NextFoods knew that the misrepresentations were misleading, or has acted recklessly in making the misrepresentations, without regard to their truth.

184. NextFoods intends that Plaintiff and other consumers rely on these misrepresentations, as evidenced by the intentional and conspicuous placement of the misleading representations on the JuiceDrinks' packaging by NextFoods.

185. Plaintiff and members of the Class have reasonably and justifiably relied on NextFoods' intentional misrepresentations when purchasing the JuiceDrinks; had the correct facts been known, they would not have purchased the Products at the prices at which the Products were offered.

186. Therefore, as a direct and proximate result of NextFoods' intentional misrepresentations, Plaintiff and Class Members have suffered economic losses and other general and specific damages, in the

amount of the JuiceDrinks' purchase prices, or some portion thereof, and any interest that would have accrued on those monies, all in an amount to be proven at trial.

FIFTH CAUSE OF ACTION

Unjust Enrichment

187. Plaintiff realleges and incorporates the allegations elsewhere in the Complaint as if set forth in full herein.

188. Plaintiff lacks an adequate remedy at law.

189. Plaintiff and other Class Members conferred upon NextFoods an economic benefit, in the form of profits resulting from the purchase and sale of the JuiceDrinks.

190. NextFoods' financial benefits resulting from their unlawful and inequitable conduct are economically traceable to Plaintiff's and Class Members' purchases of the JuiceDrinks and the economic benefits conferred on NextFoods are a direct and proximate result of its unlawful and inequitable conduct.

191. It would be inequitable, unconscionable, and unjust for NextFoods to be permitted to retain these economic benefits because the benefits were procured as a direct and proximate result of its wrongful conduct.

192. As a result, Plaintiff and Class Members are entitled to equitable relief including restitution and/or disgorgement of all revenues, earnings, profits, compensation and benefits which may have been obtained by Defendant as a result of such business practices.

PRAYER FOR RELIEF

193. Wherefore, Plaintiff, on behalf of herself, all others similarly situated, and the general public, pray for judgment against NextFoods as to each and every cause of action, and the following remedies:

a. An Order declaring this action to be a proper class action, appointing Plaintiff as Class Representative, and appointing Plaintiff's undersigned counsel as Class Counsel;

b. An Order requiring NextFoods to bear the cost of Class Notice;

c. An Order compelling NextFoods to destroy all misleading and deceptive advertising materials and product labels, and to recall all offending products;

d. An Order requiring NextFoods to disgorge all monies, revenues, and profits obtained by means of any wrongful act or practice;

e. An Order requiring NextFoods to pay restitution to restore all funds acquired by means of any act or practice declared by this Court to be an unlawful, unfair, or fraudulent business act or practice, or untrue or misleading advertising, plus pre-and post-judgment interest thereon;

f. An Order requiring NextFoods to pay compensatory, statutory, and punitive damages as permitted by law;

g. An award of attorneys' fees and costs; and

h. Any other and further relief that Court deems necessary, just, or proper.

JURY DEMAND

194. Plaintiff hereby demands a trial by jury on all issues so triable.

Dated: April 27, 2023

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Counsel for Plaintiff

Appendix 1

Tropical Green

Blueberry Acai

Pomegranate Blackberry

Mango


Mango
FLAVOR
GoodBelly
PROBIOTICS
JuiceDrink
20 Billion Probiotics Per Serving†
FROM CONCENTRATE
1QT (32 FL OZ) 946ML
Contains 25% Juice
Nutrition Facts
4 Servings Per Container
Serving size 8 fl oz (240 mL)
Amount Per Serving
Calories 100
% Daily Value*
Total Fat 0g 0%
Saturated Fat 0g 0%
Trans Fat 0g
Cholesterol 0mg 0%
Sodium 10mg 1%
Total Carb. 23g 8%
Dietary Fiber 0g 0%
Total Sugars 19g
Includes 12g Added Sugars 24%
Protein <1g
Vitamin D 0mcg 0%
Calcium 10mg 1%
Iron 0.3mg 2%
Potassium 120mg 3%
*The Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.
INGREDIENTS: FILTERED WATER, ORGANIC PEAR JUICE FROM CONCENTRATE, ORGANIC MANGO PUREE, ORGANIC EVAPORATED CANE SUGAR, ORGANIC BANANA PUREE, CONTAINS 2% OR LESS OF ORGANIC OAT FLOUR, ORGANIC FLAVORS, NATURAL FLAVOR, CITRIC ACID, ORGANIC BARLEY MALT, ORGANIC GUAR GUM, LACTOBACILLUS PLANTARUM 299V.
CONTAINS: GLUTEN from organic oat flour and barley malt.
Keep Refrigerated
Use within 14 days of opening
Manufactured for:
NextFoods
Boulder, Colorado 80301
Certified Organic by QAI
Got Questions?
Contact us at:
info@goodbelly.com
www.goodbelly.com
Manufactured in USA
GoodBelly
91770 00205 5
* Lactobacillus plantarum 299v can be found naturally in the intestinal system, and may help promote healthy digestion when consumed daily as part of a nutritious diet and healthy lifestyle. GoodBelly is a food product and not a treatment or cure for any medical disorder or disease. If you have any concerns about your digestive system, please consult your healthcare professional.
† Cells per serving at time of manufacture. Storage conditions may affect the number of active probiotic cultures. Please keep at 35–40°F for maximum potency.
Why Probiotics?
When microflora in the gut gets out of balance, harmful bacteria may take over and may cause:
• Cramping • Diarrhea • Flatulence
• Constipation • Bloating • Fatigue
Why GoodBelly?
PROBIOTICS IS ALL WE DO!
WE WALK THE TALK. Our strain, LP299V, has been recognized as one of the most researched and impactful probiotic strains available.
WE DIG SCIENCE. LP299V is naturally occurring in the human gut. It has been studied for more than 2 decades and has numerous research trials to show it may help promote healthy digestion, and overall wellness.*
When in BALANCE the intestinal microflora:
1 Supports healthy digestion.*
2 Promotes regularity.
3 Aids in absorption of nutrients.
Experience GoodBelly for yourself. Getting your probiotics is now easy and delicious!
Feel Your Belly Smile
Give it a GoodShake!
NON-GMO
SOY FREE
DAIRY FREE
VEGAN
GoodBelly
PROBIOTICS
is a delicious blend of fruit juices and a daily dose of probiotic cultures created to naturally renew your digestive health, right where your overall health gets started — in your belly.*
12 DAY Belly Reboot
START YOUR GOODHEALTH GAME PLAN
1 Sign up at: goodbelly.com/12-day-reboot
2 Check your email for coupons and print 'em out.
3 Drink one 8 oz. glass of delicious GoodBelly a day for 12 days. (That's just 3 cartons worth.)
4 We guarantee you'll love it — or your money back.‡
Reboot your belly, then make GoodBelly your daily drink to keep your GoodHealth going. Because when your belly smiles, the rest of you does too.
‡ Some restrictions apply.

Cranberry Watermelon

Raspberry Blackberry

Raspberry Blackberry

Orange


Orange
Flavored JuiceDrink
NO Sugar Added
GoodBelly
PROBIOTICS
20 Billion Probiotics Per Serving*
FROM CONCENTRATE
Contains 32% Juice
Nutrition Facts
Keep Refrigerated
Use within 14 days of opening
Manufactured for:
NextFoods
Certified Organic by QAI
Got Questions?
Made in USA
Why Probiotics?
When microflora in the gut gets out of balance, harmful bacteria may take over and may cause
Why GoodBelly?
PROBIOTICS IS ALL WE DO!
WE WALK THE TALK. Our strain, LP2999, has been recognized as one of the most researched and impactful probiotic strains available.
WE DIG SCIENCE. LP2999 is naturally occurring in the human gut. It has been studied for more than 2 decades and has numerous research trials to show it may help promote healthy digestion, and overall wellness.*
What is BALANCE
the intestinal microflora
Supports healthy digestion.*
Promotes regularity.
Aids in absorption of nutrients.
Experience GoodBelly for yourself. Getting your probiotics is now easy and delicious!
Feel Your Belly Smile
GoodBelly
PROBIOTICS
NO SUGAR ADDED JuiceDrink has 50% less sugar than orange juice and delivers the flavor pop you crave. GoodBelly provides a daily dose of probiotic cultures created to naturally renew your digestive health, right where your overall health gets started — in your belly.
12 DAY Belly Reboot
START YOUR GOODHEALTH GAME PLAN
1 Sign up at: goodbelly.com/12-day-reboot
2 Check your email for coupons and print 'em out.
3 Drink one 8 oz. glass of delicious GoodBelly a day for 12 days. (That's just 3 cartons worth.)
4 We guarantee you'll love it — or your money back.†
Reboot your belly, then make GoodBelly your daily drink to keep your GoodHealth going. Because when your belly smiles, the rest of you does too.
† Some restrictions apply.

Peach Mango Orange

Nutrition Facts

Serving Size 8 oz. (240 mL)
Servings Per Package about 4

Amount Per Serving	
Calories 90	
Calories from Fat 0	
	% Daily Value**
Total Fat 0g	**0%**
Saturated Fat 0g	**0%**
Trans Fat 0g	
Cholesterol 0mg	**0%**
Sodium 20mg	**1%**
Potassium 140mg	**4%**
Total Carb. 21g	**7%**
Dietary Fiber 0g	**0%**
Sugars 19g	
Protein 0g	

Vitamin A 0% • Vitamin C 0%
Calcium 0% • Iron 0%

**Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

INGREDIENTS: FILTERED WATER, ORGANIC PEAR JUICE FROM CONCENTRATE, ORGANIC PEACH JUICE FROM CONCENTRATE, ORGANIC MANGO PUREE, ORGANIC ORANGE JUICE FROM CONCENTRATE, ORGANIC EVAPORATED CANE SUGAR, CONTAINS 2% OR LESS OF NATURAL FLAVORS, CALCIUM CITRATE, CITRIC ACID, ORGANIC GUAR GUM, LACTOBACILLUS PLANTARUM 299V.